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VOL. III.]

MARCH 15th, 1862.

[No. 31.]

THE UNITED SOCIETY'S DINNER.

THE United Society has at last given that substantial sign of its existence looked for from a new Association—it has dined in convivial and charitable conclave at the Freemasons' Tavern. A full and special report, in another part of our Journal, will tell those of our readers who were unfortunately not able to be present on that occasion what was said and done. The reports which appeared in the daily press (rendered shorter by the pressure of parliamentary business at this season) were somewhat meagre, but the speeches are given by us *in extenso*. Never since the foundation of this Journal have we had a more agreeable task. We have watched over and have helped this young Society from its beginning, and it is a source of honest satisfaction to us to read the hopeful statistics which were placed before us at this dinner. A town and country organization, representing more than twelve hundred members of the trade, and including such men as Mr. Alderman Dakin—the respected President, and Chairman of the evening—Mr. Alderman Bowker—Professor Herapath—to say nothing of the Mayor of Manchester and other distinguished mainstays of the Association—is something to feel proud of, especially when we know that it has been raised in a twelvemonth, at a cost far less than any Society of the meanest pretensions was ever raised at before. The United Society is now on its legs—something more than a sturdy infant, and if it fails to grow into a strong and useful man, the fifty thousand English Chemists and Druggists will be alone to blame. There is nothing in the constitution of this Association which should prevent the members of the Pharmaceutical body giving it their support; and the report of the speeches given at the dinner will show the broad and liberal principles on which it is founded. The leading design of the Association—setting aside its benevolent objects—is to secure to Chemists and Druggists a wholesome liberty of trading within their own proper province. If this is not an object in which the members of the Pharmaceutical body can concur, they had better say so at once, for it is now necessary that the Bezonian should speak—choose his king, or die. Any legislative interference, promoted by the medical profession, to limit the trading and profits of Chemists and Druggists, will be as much aimed at the Pharmaceutical Society as at its younger brother, the present Association. It is useless for the followers of the late Jacob Bell to play fast and loose with the medical profession; there is no real sympathy—nothing but a hollow mockery of artificial courtesy between them. The prescribing lion will never lie down with the dispensing lamb; or, if he does so lie down, it will be with the object of swallowing him—wool and all. The medical profession have long ago thrown down the gauntlet to the whole trade, and it is high time that the challenge was taken up. The Sale of Poisons Bill still hangs over our heads—a dark cloud that may burst in a storm at any moment; and there is always fifty times as much labour in getting an obnoxious measure that has once passed repealed, as in taking it by the throat and strangling it in its birth. This is a work in which the public will stand by us as friends and supporters, for there is no

general desire to strengthen the medical profession at the expense of the Chemists and Druggists. Mr. Ablett, in his interesting speech (given in our report), has stated what hundreds of us know, that the poor and needy look upon us as friends and advisers in their hour of trouble. The medical profession know this too, and not being strong enough, with all their class feeling and class organization, to alter this state of things, they wish an unthinking Government to step forward and help them. They want a long lease granted them of those high prices, and powers of giving unlimited doses, so well exposed in that doctor's bill which Mr. Ablett quoted at the dinner. He left out one item in the hurry of speaking which would have greatly strengthened his case. The one hundred and eleven pounds sterling, charged for fourteen weeks' attendance, was swollen by a fee of ten shillings and sixpence, exacted for granting the medical certificate! The patient was dosed into eternity in the regular way, by an authorised medical man, and his relatives had to pay half-a-guinea for the name of some probably fancy disease, which they could have picked for themselves out of "Hoblyn's Medical Dictionary."

The real crime of what is called "illegal practice," in the eyes of doctors, is the remuneration which it produces. It is not the public good—the safety of life, the principles of medical science, or any other fine-sounding phrase—which the doctors really care about; it is the dirty money. They are not contented with the guineas of the rich, but they covet the humble shillings and pence of the poor. Jones, the shoemaker—Brown, the tailor—or Tomkins, the baker—may prescribe to his heart's content, if he can get anybody to consult him on the question of bodily ailments, and the doctors never raise a protest against such "irregular practice." It is only the Chemist and Druggist that they tilt against, simply because he is often their rival in the dispensing part of their business. They want the bodies of the public handed over to them by Act of Parliament for unconditional physicing, and would be very indignant if a counter-movement took place among the Chemists and Druggists to prevent them selling drugs. A medical education very seldom includes that practical knowledge of drugs which the most humble trader often possesses; and if an examination was called for, it would be found that there was a good deal of "irregular dispensing" by Fellows of the College of Surgeons. The old bugbear about "wholesale poisoning" has done good service in its time; but, surely, now it is time to put it on the shelf as a mouldy bore. The *Lancet* of March 8th, in reviewing our dinner, our Society, and its avowed objects, under the not very complimentary heading of "Insurrectionary Chemists," has recourse to this old trick, to frighten the timid and unthinking. We are accused of proposing "that every man, however ignorant, however unqualified and untrained, shall be authorized to sell a penny-worth of arsenic or of laudanum to the first suicidal maniac who shall seek the means of self-destruction," &c. It is needless to say that the Chemists and Druggists—United or Disunited—traders or Pharmaceutical Society men, never proposed anything of the kind. It would be difficult to prevent a suicidal maniac destroying his life, if he had determined to do so, even if fifty thousand Government inspectors lived in fifty thousand druggists' shops, like brokers' men in possession, and the doctors were secured in a very comfortable monopoly. How many people have been poisoned by Chemists and Druggists, compared with the numbers destroyed by doctors, either in the way of business, or in a less legal way? Was the victim of a clothes-basket full of medicine (before alluded to) despatched by "irregular" or thoroughly "regular" practice? and was the late Mr. Palmer, of immortal memory, a mere chemist at Rugeley, or a "regular" practitioner?

Let the demand come from the public first for legislative interference, and not from a body of interested professionals. A very weak letter, in the number of the *Lancet* before quoted, says a good deal more for this "illegal practice" than the writer evidently meant to say. "In the neighbourhood in which I live (he says) there is an unqualified man, who practises with considerable success." Will this writer kindly give us his idea of an "unqualified man," and then explain how "considerable success" comes to reward such a supposed untrained doctor? Success we

generally look upon as the reward of merit; and, any way, it is a proof that the poor patients of this "illegal practitioner" are tolerably satisfied. He may not have killed a patient for one hundred and eleven pounds, nor have charged half-a-guinea for the necessary grave ticket; and this, while it shows how "unqualified" he is in many respects, helps to account for the "success" he has met with in his labours. Hundreds of such men, who toil early and late as Chemists and Druggists, always have prescribed in this way, and always intend to prescribe—meeting a genuine demand with a genuine supply. It will be part of the business of the growing United Society to see that they are not interfered with.

A SENSATION DRAMA—OFF THE STAGE.

THE dramatist of the present day need not attempt "to hold the mirror up to nature," for, strange to say, a truthful picture of men and manners is not nearly so attractive as a phantasmagorical representation of life, full of startling effects and thrilling situations. Sensation dramas are nightly drawing crowds to many of the London theatres, and the demand for these exciting and unwholesome productions is increasing. To meet this demand authors are rapidly draining foreign sources, and unless a reaction in favour of less spasmodic dramas sets in, they will soon be at a loss for wild and improbable plots. Tragedies of the most heart-rending character, pleasant comedies, and screaming farces, are common enough in real life; but incidents suited for a sensation drama are seldom met with in this commonplace world.

The report of the examination of Selina Smith, a young gipsy, at the Wandsworth Police Court, has probably been turned to account by some of our dramatists, and we shall not be surprised if a large crop of sensation plays springs from that mysterious case. The facts brought to light in the examination of the fortune-teller might be easily improved, and woven into a most interesting plot, and, by a slight effort of imagination, the dark-eyed Selina might be elevated from a dishonest dealer in door-mats, to a romantic and high-minded stage gipsy.

The case, which affords such good materials for a sensation drama, presents several points of interest to the Chemist; and, therefore, falls within our sphere of observation. The gipsy, a young woman of twenty, has been convicted of obtaining a dress and some money by false representations, from the wife and servants of Dr. King, a medical man residing at Wimbledon. From the evidence of the servants, it appears that the prisoner went to the door with mats for sale, and received from the too credulous cook the sum of one shilling for the gratifying information that she, cooky, had a lucky countenance, and would be married to a gentleman. The gipsy then had an interview with the lady of the house, and was heard by the cook and her fellow-servant to say, referring to Dr. King,—"*As sure as there is a God, he will die in a month.*" This piece of news seems to have been highly satisfactory, for the lady gave the gipsy an old dress and two shillings. Three days after, the fortune-teller called again, and brought with her a brown powder, which, in the presence of the cook, she mixed with cold water in a bottle. The woman's direction that three drops were to be put into every cup of tea, together with her remarks on the previous occasion, led the cook to believe that the powder was intended to kill her master at the expiration of a month. The mixture was offered to Mrs. King for ten shillings, but the lady refused to accept it on these terms, and stated that she would not pay anything for it until she found that *it had done her good*. The gipsy thereupon refused to leave the house, and Mrs. King had to have her turned out by main force. A policeman was waiting for her, and, at the request of Dr. King, who had heard part of the conversation from his study, he at once took her into custody. She told the officer that the lady had asked her to get a bottle of stuff to put her husband out of the way. The bottle was found in the kitchen, and the prisoner stated that she got the powder it contained from her mother, on Barnes Common.

Such is the story of the gipsy and her mysterious powder, as mysterious now as

when it fell into the hands of Sergeant Davis, a month ago. The prisoner appeared four times before Mr. Dayman, the magistrate, and has been sentenced to three months' imprisonment, with hard labour; but the simple operation of analysing the contents of the bottle has never yet been performed. We believe that the powder is nothing more than a portion of the soil of Barnes Common, but it may be something very different. Whatever it may be, Mr. Dayman ought to have known better than to have dealt with it in the way he has. Our readers will scarcely credit us, when we state that the contents of the bottle were actually entrusted by this sapient magistrate to the supposed intended victim, Dr. King, in order that he might get the powder analysed by a chemical friend.

An extraordinary letter in the *Times*, signed "Medicus," greatly increased the interest taken in this sensation case. This letter is worth extracting, for if it be not an elaborate hoax, it reveals the existence of an agent far more terrible in its effects than any of our poisons:—

"Among other jealously-guarded secrets of the gipsy race is the art of preparing what they term the 'drei,' or 'dri,' a most deadly and insidious destructive agent, and for which medical science knows no antidote. Analysis detects no noxious properties whatever, and the most careful examination, microscopical or otherwise, shows it simply to consist of apparently harmless vegetable matter. The 'drei' then is merely a brown powder, obtained from a certain species of fungus forming the nearest connecting link between the animal and vegetable kingdoms, the powder consisting of an infinity of sporules. These fungoid sporules possess the peculiar property of being further developed only by intimate contact with living animal matter (as when swallowed, &c.); they then throw out innumerable greenish yellow fibres, about 12 or 18 inches in length. When the 'drei' is administered, usually in some warm drink, these sporules are swallowed, attach themselves to the mucous membrane, germinate, throw out millions of these silky fibres, which grow with awful rapidity, first producing symptoms of hectic fever, then cough, eventually accompanied by incessant spitting of blood, till death finally inevitably supervenes, usually in about a fortnight or three weeks' time. A case of this description came under my notice in Italy, in 1860. Although the patient was attended by eminent physicians accustomed to deal with cases of slow poisoning, no suspicions of foul play were entertained till the day after the decease, when an autopsy being held revealed the cause of death. The fibres, the growth of which had ceased with the cessation of the animal life and heat that had supported them, were already partially decomposed; had another day or two elapsed, no trace would have been left of the foul deed. If the analysis of the mixture in question reveal no deleterious drug, let a dog or other animal be daily dosed, as the gipsy recommended, with 'three drops' in some warm vehicle. The result would show whether the brown powder is or is not the world-famous and destructive 'drei.'"

The suggestion made by "Medicus" has not yet been adopted; at any rate, if it has, the public have yet to learn the result. At the last examination of the gipsy, Dr. King, after having had the powder in his possession for a whole week, said he intended to try experiments on a puppy.

In justice to Mr. Dayman, we must state that he at first gave orders that the mixture in the bottle should be properly analysed, and for that purpose it was taken to Professor Taylor, of Guy's Hospital; but he very justly refused to have anything to do with it until he was assured that his expenses would be paid. In a letter to Mr. Dayman, the Professor stated that the fee for the analysis would be five guineas, and another fee of five guineas for attending to give his evidence, besides other expenses he might be put to. He complained of fees in other cases not having been paid, and thought it was time that they were properly defined. The magistrates had refused to pay former fees only because they had no fund at their disposal. The only course open to Mr. Dayman was to give an order to the Superintendent of the Wandsworth police, who would have had to forward it to Sir Richard Mayne, to submit to the Secretary of State. To avoid such a roundabout proceeding, the magistrate handed the mixture to Dr. King, whose report upon it would have little weight in any future trial. At present the terrible question, "Is it drei?" remains unanswered, and the writers of sensation dramas can take the worst and most attractive view of the case.

THE MANUFACTURES OF PRICE'S PATENT CANDLE COMPANY.

A DAY AT THE SHERWOOD WORKS, BATTERSEA.

BEFORE we describe the economy of the great hive of industry which has been established at Battersea by Price's Patent Candle Company, we will briefly allude to the principal sources of artificial light, and the development of manufacture in respect to them.

At the commencement of the present century the contrivances in common use for obtaining artificial light were limited to badly-constructed oil-lamps, and candles of wax and tallow. That great agent of civilisation, coal-gas, was then a chemical curiosity, and those who proposed it for lighting the streets of large towns, were thought to be somewhat deficient in common sense. However, gas-illumination on a large scale was given a fair trial in 1813, and its development has been so rapid and complete that, at the present time, this admirable means of turning night into day is adopted in every important town throughout the civilised world. The introduction of a light at once so cheap and brilliant necessarily gave a great impulse to improvement in the manufacture of candles and other portable lights for domestic use. The researches of Chevreul on the constitution of fatty bodies indicated the proper course to be taken by the candle-maker. While scientific men in England had been perfecting the processes for making gas, this French chemist had been patiently investigating the nature of fats with a view to determine the relative value of their several constituents for illuminating purposes. He found that every natural fat contained substances which ought not to be present in candle-material, as they have the effect of reducing the illuminating power of the flame and of rendering the material greasy and offensive. Thus tallow, the fat most generally known, is composed of at least two distinct solid bodies, *stearic* and *margaric acids*, one liquid oil, *oleic acid*, and a syrupy body, *glycerine*, which serves as a base to the three acids. Each of the three acids when burnt in a wick gives a much larger and more brilliant flame than the tallow from which it is derived, while the glycerine burns with a flame that is scarcely visible. To obtain a good candle-material it is therefore evident that the latter body must be removed from the neutral fat; and as the presence of oleic acid renders the material soft and greasy, this substance must also be got rid of. Chevreul described a process by which the hard acids might be separated in the year 1823. From that time candle-making has advanced with rapid strides, and what was once a rude and noisome trade has become a first-class chemical manufacture. To appreciate the difference between the two phases of the art, we need only compare the common parlour candle of a dozen years ago with that which now takes its place. The snuffy, greasy, guttering, feeble-flamed *mould*, formed of simple tallow, represents the mechanical stage of candle-making, and is rapidly becoming a thing of the past, a relic, in fact, of the *dark ages*. Instead of this we find in general use, a hard, clean, polished cylinder, composed of beautiful chemical products, which burn away brightly and steadily by a slender and snuffless wick. With the manufacture of the inferior kinds of candles, science has not yet meddled, and unpurified tallow is still used for the humble dips which illumine the homes of the poorer classes. The costly substances, wax and spermaceti, are also employed now as formerly, in the manufacture of candles, but modern chemistry has introduced a candle-material which has already, to a great extent, superseded them; we allude, of course, to the beautiful white and translucent paraffin, or Belmontine.

Improvements in lamps have kept pace with those in candles. A great step in the right direction was taken by Carcel, of Paris, who introduced the beautiful mechanical lamp in which clockwork is employed to pump up the oil from the reservoir, and thus keep the burning wick constantly and uniformly supplied. In the *moderator*, a later French invention, the same result is obtained by the action of a powerful spring, the flow of oil being regulated by a most ingenious and simple contrivance, from which the lamp receives its name. The introduction of mineral oils as burning fluids, has led to the employment of lamps of very simple construction, for those oils are so light that the capillary action of the cotton wick serves to raise them from the reservoirs. The mineral

oils yield an intense white light admirably adapted for domestic use. When properly prepared they contain no explosive bodies, and may be burned in suitable lamps with perfect safety. We shall have to speak about one of the best kinds of mineral oil, namely, *Belmontine*, presently, as it is one of the products of the works we are about to describe.

The above imperfect sketch of the progress of manufactures relating to artificial light must suffice as an introduction to our account of the processes carried on at Sherwood.* We should like to give the history of Price's Patent Candle Company, and show how every improvement introduced into their manufactures has led to an extension of premises, and the employment of new hands. This history would, however, take up more space than we can spare at present, but we may be tempted to make it the subject of a future article, as we are convinced that our readers would be interested in a sketch of the progress of scientific candle-making in England.

The Sherwood Works at Battersea extend over about eleven acres, of which some six have been roofed in. One would imagine that these eleven acres would afford ample space for all the operations of the Company, yet in addition to these there are many acres at Bromborough Pool, near Birkenhead, on which immense crops of Price's Patent Candles are raised. Then there is the parent establishment, Belmont, at Vauxhall, and within a stone's throw of this the night-light factory. If the demand for the products of the Company goes on increasing, the Directors will soon have to look out for a convenient desert island on which an unlimited number of iron-roofed structures may be erected. At present we have no business at Bromborough or Belmont, but are bound for "Merry Sherwood," whither we ask the reader to accompany us.

We reach the Works at an early hour, and though we have just breathed the fresh air of Clapham Common we fail to detect the unpleasant smell which was once so characteristic of a candle-making establishment. There is no bad smell, simply because there is no waste. The offensive and irritating vapours of *acrolein* that used to make candle-making so noisome can only be produced at the expense of one of the most valuable constituents of fat, namely, glycerine. Here, at Sherwood, this body, instead of being decomposed and wasted, is carefully separated, and actually sold at a higher price than any of the combustible bodies with which it is associated. In the timekeeper's lodge we find the gentleman commissioned to act as our guide, and from whom we learn that no fewer than 800 people are employed on the works, although every effort has been made to carry on operations by machinery. As in a cotton factory, the greater number of men and boys are occupied in intelligently directing the various machines, and in feeding them with material.

We commence our tour of inspection at the wharf where the raw materials are landed. These are so numerous that we shall not attempt to catalogue them; but merely state that any substance, whether animal, vegetable, or mineral, that can be made to yield candle-material, may safely be included in the list. Though the manufactures of the Company vary little in quality, the raw materials used are always those which can be got at the cheapest rate. There are, however, three products which may be regarded as the common materials used in the manufactory. These are palm-oil, cocoa-nut oil, and Rangoon tar or petroleum. We are told that the casks heaped up around us contain the first-named product. At this season palm-oil is a solid body, but by an extremely simple process it is got out of the casks without even removing the heads. The casks are rolled from the wharf to a large shed, the floor of which is traversed from end to end with an opening about a foot wide, which is in communication with an underground tank. Over this opening the bung-hole of each successive cask is brought, and a jet of steam is made to play upon the solid mass. The heat of the jet speedily melts the oil, which flows out of the bung-hole into the tank, whence it is pumped by steam-power to a large pipe which conveys it to the distilling-rooms.

We may here state that the so-called "rooms" of this great factory are large one-

* Those who wish for fuller information on this subject are referred to Professor Ansted's paper on "Artificial Light," in the *Popular Science Review* for October 1861.

storied buildings roofed with galvanised corrugated iron. The style of architecture may be objected to by those who are learned in æsthetics, for the great prominence given to the "packing-case" and "boiler" elements. However, the buildings are found to be admirably suited to the purposes for which they were erected, and, after all, are quite as imposing as those which form the South Kensington Museum.

Into one of these vast boiler-like structures we are now conducted, and learn, with no little surprise, that it is here that the hard fatty acids are separated from the glycerine. We expected to see long rows of furnaces and retorts, watched by dozens of greasy workmen, and were fully prepared to encounter such a stench as might be produced by blowing out a thousand tallow candles at once. But we see no furnaces, nothing like an ordinary retort, and very few workmen—all remarkably clean. The most sensitive nose might be allowed to sniff the odour, which, though strong, is not offensive. The predominating smell is that of palm-oil, which, to our thinking, is agreeable, rather than otherwise. The absence of furnaces is accounted for very easily. Throughout the factory, steam, either at the common temperature or superheated, is employed as the source of heat in all operations connected with the separation and purification of candle-material. The steam is conveyed to the different rooms by suitable pipes, and the smoke and dust of the furnaces are thus kept at a respectful distance.

When the stearic candle manufacture was in its infancy, the fat acids were separated from the glycerine by the process called *lime-saponification*. Tallow was first boiled up with thin cream of lime, which seized upon the fat acids and caused them to forsake the more feeble base glycerine; the soap of lime thus formed was then treated with sulphuric acid, which, by uniting with the lime, set free the fat acids. This was an expensive process, as to each cwt. of tallow 14 to 16 lbs. of lime, and 28 to 32 lbs. of sulphuric acid, were employed; moreover, in the candle-material, stearic acid, when obtained, was only in the proportion of two parts to five of the tallow employed, and the other product, oleic acid, had little commercial value.

The process of *sulphuric acid saponification* introduced into the manufacture about twenty years ago was an immense improvement upon the lime process. It is still employed in these works, though to a comparatively small extent. The quantity of sulphuric acid now employed to decompose 1 cwt. of fat in some cases is reduced to 4 lbs., and even 3 lbs. Six tons of the raw material, usually palm-oil, are exposed to the combined action of concentrated sulphuric acid and a temperature of 350° Fahr. The result of this action is very striking. The glycerine is decomposed, large volumes of sulphuric acid are given off, and the fat is changed into a mixture of fat acids of a very dark colour with a very high melting point. This is washed to free it from charred matter and adhering sulphuric acid, and is then transferred to a still, from which the air is excluded by means of steam.

Our "guide, philosopher, and friend," shows us some interesting specimens which help to make this process intelligible to us. Here we have a bottle filled with the raw palm-oil, which is of a bright orange-red colour and of the consistence of butter. A second bottle contains something almost black and very hard, which we are told is the palm-oil after the acid treatment and washing. This product distilled, a beautifully white fatty body is also shown to us, and afterwards the pitchy residuum of distillation. On examining these specimens we get a clear conception of the width of the gulf which separates the beautiful chemical manufacture of to-day from the coarse and repulsive handicraft of thirty years back, when science had only just begun to play with the contents of the grease-pot.

We saw the thick buttery palm-oil running out of the casks, and we now get a sight of it in its altered condition. Like the heart of man, it has been purified by adversity. The vitriol and the heat have purged away the dross, and limpid streams of the pure fat acids run from the taps of the stills. The product is collected in clean cans, from which it is transferred to large tubs. A considerable time elapses before a large quantity becomes sufficiently solid for the process of pressing, and in the tubs we see the product in every stage of congelation.

The sulphuric acid process involves the waste of the glycerine, and a loss of material

owing to the decomposition of part of the fat acids. These defects induced the chemists of this manufactory to seek for a still more perfect process, and in 1854 such a process was discovered. This consists in passing superheated steam directly into the neutral fat, by which means it is resolved into glycerine and fat acids; the glycerine distilling over in company but no longer combined with them. The advantages of this process are so evident that we need not dwell upon them. Glycerine, which was formerly looked upon as a nuisance, as something to be got rid of at a great expense, is now more valued and sells at a higher rate than its early-prized associate, stearic acid. The applications of glycerine are too numerous for us to describe them here, but we may state that they belong to the domains of the doctor, the chemist, the naturalist, the soap-maker, and the perfumer. We may remind our readers that the presence of this body in the tallow candle gives rise to the offensive odour of the snuff when the flame is extinguished.

The mixed fat acids obtained by either process, are used just as they come from the still for making the cheaper kinds of candles. But to obtain the pure stearic acid, used in making the beautiful Belmont sperm candles, the product of the stills has to be subjected to hydraulic pressure, first at the temperature of the air and then in heated closets. The material is spread on mats of cocoa-nut fibre, which are then conveyed to the press-room, whither we now follow them. A clever writer, who has gone over the ground before us, thus alludes to those fat-coated mats:—"As they pass in huge piles before you, the imagination may picture a tea-party of Brobdingnagians, and these are the countless rounds of brown bread and butter provided for the occasion." In the press-room we see these piles undergoing a kind of inquisitorial torture, and perspiring streams of the liquid oleic acid. Most of the piles are upright during pressure and fully exposed to view, but a few are laid in coffin-like iron chambers, and cruelly exposed to the action of scalding steam. We are glad to get away from this room, for, to us, there is something very terrible in the steady, slow, silent, and unfeeling action of these hydraulic presses. In another building we are shown a long line of heated chambers or ovens, in which the process of pressing is completed. To these chambers the piles of sandwiches which have undergone cold pressure, are carried, and by a second squeezing, together with the action of heat, every trace of oleic acid is removed from the candle-material. The hard cakes which remain between the mats are next treated with dilute sulphuric acid, to remove any rust which they may have taken up, and are then melted.

The melting process may be described in a very few words:—The candle-material is placed in large wooden vats; into each a long coil of pipe depends, admitting a hissing jet of steam. The hard substance is by this means rapidly liquefied, and the use of metal boilers upon which the fats would act, is obviated.

Having followed the vegetable fats from the wharf to the melting-room, our conductor introduces us to quite a different manufacture of the Company, from which, however, candle-material results. On the wharf we noticed a number of cubical iron cisterns and large barrels, which gave off a very peculiar and far from agreeable odour. These contained Rangoon tar or petroleum, a natural product of the kingdom of Burmah, where it wells up from the ground like naphtha. We now enter the building in which this liquid is distilled, and so separated into useful products. These come over at different temperatures ranging from 160° to 620° Fahr. The most volatile, and therefore the first, product, is an extraordinary liquid to which the name *Sherwoodole* has been given. This is used as a detergent for removing grease from fabrics, cleaning gloves, and for numerous other purposes. The next product is the well-known *Belmontine Oil*, which is perhaps the very best of the many varieties of paraffin oil at present offered to the public, having no perceptible colour and comparatively little smell. The two next products are light and heavy oils, well adapted for lubricating spindles, and much cheaper than the ordinary oils now used. Last of all, when the temperature is considerably elevated, the beautiful white translucent solid termed *Belmontine* distils over. This is a kind of paraffin, and is, without exception, the most elegant candle-material known. In distilling this substance, superheated steam is made use of. There is little to describe in this part of the works, for the process of distillation goes on so steadily, that the work of the attendants is almost entirely confined to testing the specific gravity

of the product which comes over, so as to keep the Sherwoodole from the Belmontine oil, and the latter from the lubricating oils.

On our way to the candle-room we take a peep at the noble steam-engine which works most of the pumps, presses, lathes, and other machines employed on the works. In an apartment adjoining the engine-room we are shown some reservoirs of force, in the shape of strong iron boilers filled with compressed air. Pipes convey this compressed air to the candle-room, where it is made use of in a manner presently to be described.

The candle-room, to which we are now conducted, is 160 feet long by 100 feet wide, and is fitted up throughout its entire extent with parallel benches, running from end to end. In these benches, ranged close together, are the candle-moulds, which are so numerous that upwards of a hundred tons of candles can be made with them in a single week. Along the top of each bench there is a little railway, on which runs the "filler,"—a car containing hot candle-material. The wicks having been adjusted truly in the moulds, the filler advances and drops in each frame of moulds the requisite amount of material. After a sufficient time has been allowed for solidifying and cooling, the boys who attend the machines proceed to remove the candles from the moulds. It is in this operation that the compressed air is made use of. Each mould is connected with the reservoir, and on merely opening a tap, pop goes the candle, which is dexterously caught by the operator. This mode of blowing the candles out of the moulds has thus been referred to by the graphic writer who supplied us with the brown bread-and-butter smile:—

"The candle-moulds and the air-pump constitute an immense air-gun, containing thousands of barrels, each barrel loaded with a candle. The turning of a cock by boys in attendance lets off these guns, and ejects the candles with a slight hissing noise. This fusillade is going on all over the room throughout the entire day, and in the course of that time no less than 188,160 candle projectiles, weighing upwards of fourteen tons, have been shot forth."

Innumerable contrivances for "drawing candles" have been attempted at home and abroad, but none equal this, as the compressed air, though so powerful an agent, cannot possibly injure the fine polish of the moulds on which the beauty of the candles greatly depends. We should mention that the tops of the candles are downwards when moulded. As the specific gravity of the candle-material varies, the plan has been adopted of cutting the candles to the exact weight by circular saws. At one time the Company had great difficulty in some of the export markets, having with their pound packets of 16 oz. to compete with foreign pound packets of 13 oz. to 15 oz. In self-defence they had, therefore, to make two sizes of packets, both labelled prominently, the one as being 16 oz., the other as being 12 oz.

The principal descriptions of candles manufactured by the Company are the *Belmont sperm*, made of the hot pressed stearic acid; *Belmont wax*, the same material tinted with gamboge; *Belmontine*, the paraffin of Rangoon tar; and various kinds of composite candles made from mixtures of the hard palm acids and cocoa-nut stearine. In every kind the wicks are so prepared as not to require snuffing.

On leaving the candle-room we stroll through the long line of workshops, in which we see little armies of coopers, braziers, smiths, carpenters, and even weavers, at work—the latter being employed in manufacturing the mats of cocoa-nut fibre. We next take a peep at a large swimming-bath which has been erected at the expense of Mr. James Wilson for the use of the boys employed on the works, who so thoroughly appreciate the benefits and pleasures of bathing, that the manager has been compelled to limit the number of bathers to forty at a time.

We have yet much to say, but have already far exceeded the space allowed us. We should like to speak of the admirable schools attached to the factory, of the well-drilled company which the establishment contributes to the 19th Middlesex Volunteers, and of many other matters which interested us so much on our pleasant day at the Sherwood Works.

J. C. B.

GELSEMINUM SEMPERVIRENS.

SYNONYMS.—Yellow jessamine, Wild jessamine, Carolina jessamine, Woodbine.

HISTORY.—The febrifugal powers of this plant are said to have been first discovered by its having been successfully given to a planter labouring under bilious fever, in mistake for some other plant. It is generally regarded throughout the Southern and Western States of North America, as possessing the most valuable properties for subduing febrile disorders, and has been known, in domestic practice, for many years, both in the South and West, as a vermifuge. Its generic name is said to be derived from *Gelsemino*, the Italian name of the jessamine.

BOTANY.—The root varies from three to thirty feet in length, its average being about fifteen feet, and its branched and scattered fibres run horizontally near the surface of the ground, and sometimes merely under the leaves, for several feet. Its stem is from twenty to thirty feet long, smooth, shrubby, twining, without hairs, of a green colour, and always runs to the top of the tree on which it fastens, and then branches out, covering the topmost branches with its thick foliage. Its leaves are smooth, opposite, perennial, and of a fine deep green colour. It blossoms from March to June, according to locality. The flowers are yellow, very fragrant, but less so than those of the common jessamine, and quickly fade. The fruit consists of a berry, which, when ripe, is of a black colour. It is indigenous to the Southern States, and is most abundant on the banks of rivers and near the sea-coast; and is extensively cultivated as an ornamental plant—the fine yellow colour of its flowers contrasting well with its rich deep green leaves. It belongs to the natural order *Scrophulariaceæ*—the Figwort order.

CHEMISTRY.—Every part of the plant possesses active properties; but the root is the portion employed for medicinal purposes. No accurate analysis of its constituents has yet been made, but its virtues appear to reside in a peculiar alkaloid principle termed *gelseminin*. As prepared by Messrs. Tilden and Co., of New York, gelseminin is a yellowish brown powder, possessing a very bitter and saline taste.

MEDICINAL PROPERTIES.—There is probably no article in the *Materia Medica* on which such conflicting opinions have been expressed. With some physicians it is held in very high repute, whilst others cannot be persuaded to give it a trial. As a remedy in fevers and pectoral affections, it has enjoyed the greatest reputation. Dr. Miller considers that it will cut short typhoid fever, when given sufficiently early in the disease. He has proved successful with it in the treatment of the various fevers peculiar to the West and South, as well as in inflammatory diseases generally, in obstinate cough (particularly epidemic whooping cough), in nervous and spasmodic attacks, in hæmorrhage from the lungs or uterus, and as an external application in neuralgia, and in sporadic dysentery, an infusion of it being employed as an injection, in conjunction with slippery elm bark. Dr. Gary used it with benefit in nervous diseases, inflammation of the brain, pneumonia, pleurisy, and acute rheumatism. Dr. Goss found it to be an excellent antiperiodic to arrest remittents and intermittents, without the use of quinine or any other remedy. Dr. Pattee thinks it can well rank as a direct sedative to the nervous system, and, secondarily, to the circulation, while it occasionally acts as a diaphoretic and diuretic. Drs. Ford and White, with a view of testing its effects in comparison with other remedies, in the yellow fever epidemic in Charleston, selected an equal number of cases for trial. The results were, that of those treated with the old plan of calomel, &c., one-half recovered; of those treated with veratrum viride, one-third; and all recovered who were treated with gelseminum. Dr. Tully used it in cough, including whooping cough, dyspnoea, phthisis, acute and sub-acute rheumatism, hysteria, &c. Many other eminent physicians have also borne ample testimony to its efficacy as a medicinal agent. It has also been given in conjunction with lupulin in spermatorrhœa, and is said to approach as near a specific for that disease as any medicine can do. In large doses it is poisonous, causing great prostration, nausea and vomiting, dilatation of the pupils, and more or

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less loss of sight, inability to speak or move, coldness of the surface, &c. The best antidotes are ammonia, brandy, quinine, and, perhaps, iodine.

PREPARATIONS AND DOSES.

The powdered bark, infusion decoction, fluid extract, tincture, and gelseminin. The powder is said to be far inferior to the fluid extract or tincture. Doses: fluid extract, gtt. iij. to gtt. xx.; tincture, gtt. x. to gtt. xx. as an ordinary dose; gelseminin, gr. ss. to grs. ij.

SCIENTIFIC INTELLIGENCE.

Cohesion-Figures of Liquids.—Mr. Charles Tomlinson, in a paper read before the British Association last year, called attention to the fact that, when a drop of an independent liquid (*i.e.*, not a solution) is gently deposited on the surface of another liquid (such as water), it flattens out into a peculiar and characteristic figure, which is the resultant of its cohesive force, its density, and the adhesion of the surface. Since the publication of this paper, the author has ascertained the *cohesion-figures* of numerous liquids, and has made some progress in establishing their value in analysis, more particularly in the detection of adulteration. An interesting account of his experiments, with the most minute details respecting manipulation, will be found in the *Philosophical Magazine* for the present month. For the production of the figures the vessels and glass rods must be absolutely clean, and the surface of the water upon which any drop is deposited must be perfectly tranquil. The most suitable vessel is a conical glass tumbler, about three and a-half inches in diameter at the mouth. It should be washed from time to time with strong sulphuric acid, and rinsed after every experiment with a strong solution of caustic potash, and then with water. The water used need not be distilled, provided it be clean. The drop to be examined must not be allowed to fall on the surface, but be gently delivered to it from the end of a glass rod or dropping-tube, which must be kept clean by means of the potash solution. The cohesion-figures of different liquids are distinguished by their patterns; and, from Mr. Tomlinson's glowing descriptions, we conclude that they are very beautiful. The modifications which take place in the figures by the mixture of one liquid with another, in varied proportions, are very striking, and at once suggest a means for detecting certain adulterations. For example—balsam of copaiba, when pure, forms a figure consisting of very perfect concentric rings, of great breadth and splendid metallic colours, changing and disappearing as the film becomes thicker. The outer edge of the film is quite sharp and perfect. Now this balsam is soluble in alcohol, so that any adulteration of it by means of a fixed oil could be easily detected, except castor oil, which is also soluble in alcohol. The cohesion-figure of castor-oil is also well marked; it has narrow iridescent rings around a colourless disk, and is fringed with a broad perforated pattern. A mixture of two-thirds balsam and one-third castor-oil, made under a gentle heat, forms a blank white film of large size and clear edge, quite destitute of colour. There is not a vestige of the brilliant bands of the copaiba, or the delicate halo and coloured fringe of castor. The film lies passively on the water, with no other indication of its origin than the gradual formation at its close of a very minute chain of colourless beads or bosses gradually enlarging within its clear edge, precisely similar to those which close the existence of the copaiba film; and, still later, a partial attempt at a fringe (but without colour) like that of the castor film.

Iceland Moss in Dysentery and Phthisis.—In a letter to the *Lancet*, Mr. J. Mitchell, L.R.C.S.E., recommends *Lichen Islandicus communis*, in the form of a concentrated syrup, as a remedy in dysentery, phthisis, and strumous diseases generally, stating it to be infinitely more valuable than "the nauseous drug, cod-oil." The method of preparing the syrup is as follows:—Take a pound and a-half of the moss; soak in hot water, not boiling, for one night only, so as to get rid of grit and sand, and then drain carefully; afterwards boil for two hours, so as to make an infusion, with one quart of water and a pound and a-half of sugar added; then strain, add another quart of water, and boil for half an hour, thickening with a slight further addition of sugar; and when nearly

cold, add four ounces of brandy or any other spirit. It is then ready for use, and the doses given are similar to those of the cod-liver oil.

Wine Improved by Chemistry.—Science, ever adapting its resources to new objects, has lately done so in a curious way in France. M. Maumère, Professor of Chemistry at Rheims, has been trying experiments on wines. Noting the sparkling effervescence produced by carbonic acid in Champagne, and some other wines, he was led to try experiments in oxygenising wines. A sort of condenser was used, from which the oxygen was forced into the wine, and it was found that such treatment rendered the wine far more sparkling and exhilarating than ordinary champagne. A large number of very curious experiments have been made by M. Maumère, and he believes the process will be generally available for producing wines, and very useful in many cases of chronic disorders, which are now difficult to treat. In noticing M. Maumère's experiments, a good-tempered critic says—"For some years past our choicest perfumes, bearing the pleasantest of names, have been procured from sources so foul that they must not be named to ears polite; and with the present rapid advances of chemical science, some of our purest wines of the most famous vintages may hereafter be produced, not on the sunny slopes of Champagne or the Rhine, but in the dark recesses of the laboratory, and ripened and matured by the practical chemist's skill."



The Universal Chemist and Druggist.—Price One Penny. London: George Vickers.

SEVERAL subscribers have drawn our attention to this formidable rival, and at the risk of impairing our circulation, we now introduce it to the notice of the whole trade. Though the proprietor has coolly stolen our title, we still hesitate as to whether we shall take proceedings against him or not. The barque which he has launched into the stream of periodical literature, though sailing under false colours, is intended to convey precious Medical secrets to all those who are ailing and wanting advice gratis. Why should we scuttle it? It is not a trade journal; in fact, its mission is to supersede Chemists and Druggists entirely. Though aiming at universal dominion, it comes to us in exceedingly modest guise—in a flimsy wrapper, and got up altogether in the style of the well-remembered halfpenny editions of *Jack the Giant Killer* and *Puss in Boots*. We cannot pretend to criticise the information given by this new guide to Pharmacy. A few extracts will show that it is of far too high a character for us to deal with:—

No family should be without an alembic or still, as that will be of material service; with that instrument the simple waters are to be made, with no expense except the fire.

Viper wine is made of two ounces of dried vipers and two quarts of white wine.

As to plaisters in general, they do more harm than good; the bruised leaves of herbs are better than all the plaisters in the world.

If a pearl cordial be desired, it is only mixing the simple and strong waters without syrup or tincture, and adding two drachms of sugar, and half a drachm of levigated oyster-shell. The apothecaries will not be pleased with disclosing the mysteries of their profession, but the public good is of more consequence than their pleasure.

The charitable may supply the place of the apothecary to those who cannot afford such assistance, and experience is so good a guide, that they will be able in most cases to save the expense of the doctor also; and there will be this satisfaction in their own mind, that while they deal principally with those innocent sort of medicines which the fields afford them, they will be in very little danger of doing harm. The Galenical physic perhaps will be found effectual in many more cases by those who stick to it solely, than they who do not practise the use of it are aware of. As to the mischief of medicine, that is almost entirely chemical. It would be idle to say that chemical medicines do no great good, but they require to be in skilful hands; when the ignorant employ them, death is more likely to be the consequence than the relief from the disorder any other way.

NEW BOOKS.

- Allshorn's Handy Book of Domestic Homœopathic Practice. 3s. cloth.
 Book of Trades. 12mo, 2s. cloth.
 Cooke's Manual of Botanic Terms. Fcap. 8vo, 2s. 6d. cloth.
 Gmelin's Handbook of Chemistry. Vol. I. Tr. by Watts. 2nd edit. 10s. 6d.
 Guernsey's Homœopathic Domestic Practice. 3rd edit., by Thomas. 5s.
 Hastings' Medicinal Value of the Excreta of Reptiles. Post 8vo, 5s.
 Kemp's Law and Practice in Bankruptcy. 12mo, 1s. cloth.

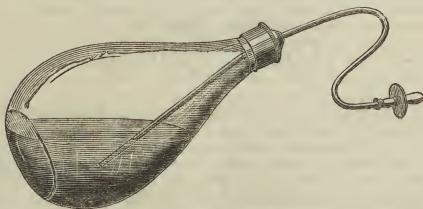
PUBLICATIONS RECEIVED.

Pharmaceutical Journal.—Technologist.—Weldon's Register.—Dublin Hospital Gazette.
 —The Grocer.—The Geologist.—Practical Mechanics' Journal.—Civil Engineer.—The
 Stationer.—Scientific American.—British American Journal.—Canadian Naturalist and
 Geologist.

[NOTE.—In consequence of so much space being taken up by the report of the meeting
 of the United Society of Chemists and Druggists, we are compelled to defer the publication
 of our second notice of Dr. Odling's *Manual of Chemistry* until next month.—Ed.]



MATHER'S INFANTS' FEEDING BOTTLE.



WE have in previous numbers of the CHEMIST AND DRUGGIST directed the attention of
 our readers to various improvements in feeding bottles, as they have appeared from time
 to time.

The article at present under notice is distinguished by its extreme lowness of price,
 conjoined with great efficiency; in form it does not differ from the ordinary shape which
 experience has shown to be most convenient in use, and to suit best the taste of the
 public. The top is of metal, lined with cork. The inner tube is of glass, and is mov-
 able, so that its end always remains in the food as long as there is any in the bottle; it
 is also tipped with india-rubber, so that any danger of its falling against the inner side
 of the glass, and breaking, is avoided. The flexible tube and teat are of the purest
 india-rubber, free from any unpleasant taste or smell. The union of the teat and the
 tube is effected by means of a perforated piece of porcelain; this we regard as a great
 improvement over the usual boxwood joint, which absorbs a certain portion of the food,
 and, becoming sour, is apt to taint the whole.

All the parts admit of being taken to pieces for the purpose of cleaning, and are put
 together again readily. In these advantages it appears to equal any of the bottles in
 use, and its lowness of price will render it certain of commanding a most extensive sale.

LEONI'S ADAMAS TAPS.

MR. LEONI has forwarded to us specimens of his Patent Adamas Taps. The material of
 which they are formed may be described at a very dense hard porcelain, formed chiefly

of silicate of magnesia; this is susceptible of a high polish, may be ground to any required form, and is perfectly free from any liability of being corroded, either by acids or alkalis. The taps therefore promise to be especially useful to chemists, for drawing off acids and other corrosive liquids, and are a cheap and efficient substitute for those made of glass and metal. They are sufficiently strong to withstand being driven into a cask or barrel with a mallet in the usual manner, and are much cheaper than the brass taps in ordinary use. They are formed in the same manner as the ordinary wooden spigot, the plug being secured from withdrawal by a ring cemented on the smaller end; it appears to us that the attachment of this ring would be more secure if the small end of the plug was formed with a series of circular rings for the cement to become securely attached to, an alteration easily effected. From their cheapness and efficiency, under the short trial we have been enabled to give them, we think these taps worthy of a general trial.

BANNER'S GRANULAR MEDICINES.

By the process of granulation, medicines are prepared in a granular form like that of gunpowder, mucilage being used to cause the powder to adhere. The granules, when formed, are next coated by means of a solution of tolu in spirit; this gives them a thin varnish, that renders them for a few minutes insoluble, so that they can be stirred into water and swallowed, without producing any impression on the nerves of taste. The advantage of this form of preparation over the ordinary impalpable powder is too evident to need remark. That such bulky and disagreeable medicines as rhubarb, Gregory's powder, &c., should be swallowed in a tasteless form, is a boon alike to the patient and physician.

The samples forwarded to us by Mr. Banner, of Liverpool (who has followed the suggestions of Dr. Skinner on this subject), consist of rhubarb, Gregory's powder, and charcoal; but the process is equally applicable to other remedies, and with those that are particularly rapid, as cubebs, and it evidently offers the greatest advantages.



THE MONTH

International Exhibition.—We have received a most interesting article from Mr. C. W. Quin, F.C.S., on the representation of Pharmacy and Chemistry at the Exhibition of 1851. Unfortunately, the article, which is intended as an introduction to the series on the Show of this year, reached us after our first sheet was made up, and we are reluctantly compelled to reserve it for our April number. The same may be said with regard to Mr. Quin's notice of Mr. E. C. C. Stanford's lecture "On the Economic Applications of Seaweed." Mr. Quin reminds exhibitors that *the 31st instant is the last day for sending in goods*. The space is now marked out, but it seems that many have as yet taken no heed of the invitation sent by the Commissioners to effect it.

Poisonings.—*By Prussic Acid.*—On the night of Sunday, the 23rd ult., Mr. Frank Taylor, aged 21, a medical student, residing as a pupil with Dr. Bletchley, of Tabernacle-walk, City-road, committed suicide by swallowing a large quantity of prussic acid. At the coroner's inquest, Dr. Bletchley said that he was called by one of the servants in the morning, and, upon finding the door of the deceased's room fastened, he made a forcible entry into the apartment. He discovered the deceased lying on the bed in a composed state, and the bedclothes covered over him. There was some frothy mucus upon the pillow, and the odour of prussic acid was very perceptible. He searched the room, and found a bottle in the wash-hand basin which contained a small portion of prussic acid, and the appearance of the body was that of a person who had died from the effects of that poison. Two letters in the handwriting of the deceased were also found, one directed to Mrs. Bletchley, and the other to a young lady, his sweetheart, who resided in the country. The first ran as follows:—"My dear Mrs. Bletchley,—When you receive this I shall be no more. I have poisoned myself with 6 drachms of prussic acid, which I obtained from the shop. May the Lord have mercy on me, and pardon me for my sins! Let my poor girl Lotty know this as soon as possible, and send her the letter as directed. Send to my friends by the telegraph. I am sorry it should have occurred in your house; but I could not bear up against my troubles any longer. (Signed) Frank Taylor." The deceased left a number of trinkets, books, and other things, to various persons, and gave his gold watch to his sweetheart, to whom he had addressed a long letter, which filled four folios of

foolscap paper. The document was written in a very affectionate manner, praying God to forgive him for the wicked act of suicide which he had committed. Mr. Bletchley said, in answer to the coroner, that the deceased had lately, when he came from the hospital, been low and melancholy, which was attributed to his non-success at his late examination. After hearing some further evidence, the jury returned a verdict of "Temporary insanity."

By Oxalic Acid.—Last week Mr. Carter, the coroner for East Surrey, held an inquest on the body of Louisa Emily West, the wife of George William West, a painter and glazier, residing at No. 27, South-street, Hercules-buildings. It appeared that the deceased, after having had some words with her husband, put on her bonnet and proceeded to the Westminster-road, where she purchased half an ounce of oxalid acid, for the purpose, as she stated, of cleaning straw bonnets. Upon her return some further words ensued, and the unfortunate female took up a cup, poured some warm water into it, and went down-stairs to the closet, returning in a few minutes. She then said to her husband, "You couldn't help it; I have done it." Mr. Coppin, of the Westminster-road, was promptly in attendance, but the unfortunate creature was then dead. Upon searching, a paper, labelled "Oxalid Acid—Poison," was found in the closet. The jury, after a lengthened consultation, returned a verdict of "Temporary insanity."

By a Narcotic Poison (?).—The case investigated by the Liverpool coroner, a few days since, is most mysterious. Ellen Fairclough, aged 5 years, the daughter of a labourer, and a little boy, named John Spencer, on Tuesday afternoon, while walking near Walton, were met by two young men, one of whom told the children to open their mouths, and then placed in each a piece of something that looked like "white soda," which the children were made to swallow. Immediately afterwards the little boy became unwell, and vomited, but he ultimately recovered. The girl also became very sick, and on reaching home informed her mother of what had taken place, when the latter went to a druggist in Scotland-road, and procured an emetic, which she administered to the child. Warm water was also given to her, by which the vomiting was continued. The child, however, grew worse, and died the following day. A *post-mortem* examination of the body showed the cause of death to be congestion of the brain, but whether from natural causes or from the administering of a narcotic poison, Dr. Ayrton, who made the examination, was unable to say positively, unless there was an analysis of the stomach and its contents. His opinion was that death was caused by a narcotic poison. The verdict of the coroner's jury was, "That death was caused by narcotic poison, but by whom administered there was no evidence to show."

By Prussic Acid.—Mr. M. Ford, the owner of extensive chemical works at Basford, near Nottingham, has committed suicide under very painful circumstances. He had drawn a bill of exchange, and forged the name of the acceptor. When the bill arrived at maturity it was returned, and the holder of it threatened Mr. Ford with criminal proceedings. Immediate action was taken by the holder, but before the police could arrest the unhappy delinquent, he had fallen down a corpse whilst looking over his books in his counting-house, and after having taken a quantity of prussic acid.

By Corrosive Sublimite.—Francis Fretwell has been tried at Nottingham for the wilful murder of Elizabeth Bradley, at Bilborough, in July last. Both the prisoner and deceased were in humble circumstances. The deceased was a married woman, separated from her husband, and at the time when the offence was alleged to have been committed was living in service with a farmer at Bilborough. There had previously been an intimacy between herself and the prisoner, who was in service with a neighbouring farmer, and this intimacy resulted in her pregnancy. The prisoner, with her full assent, if not at her suggestion and by her desire, procured some white powder, which he gave her, telling her that it was to get rid of the child, and that she was to be careful of it, and take a little at a time. She took it in gin, and was sick, and subsequently dangerously ill. In the course of her illness she made statements respecting its cause, which led to the prisoner being taken into custody upon the charge of having administered corrosive sublimate with intent to procure abortion. On the examination of the deceased by magistrates, questions put by the prisoner elicited that the deceased had herself desired to have some drug for the like purpose, and had endeavoured to purchase corrosive sublimate and oil of savin, and that the prisoner's procuring it was with her assent, if not at her request. She died on the 24th of July, from the effects of poison, which the medical evidence showed was corrosive sublimate. His lordship (Chief Justice Cockburn) having pointed out the difficulties of the case, left it for the jury to say whether the prisoner procured the drug and caused the deceased to take it, and, if not, to say whether the prisoner procured the poison, knowing the purpose for which she wanted it, in which case he would be an accessory before the fact to the woman's administering the drug to herself. The jury found specially—first, that the prisoner did not procure and cause the deceased to take the drug; and, secondly, that he was accessory before the fact to the common law misdemeanour. His lordship said that he should reserve the question whether the finding of the jury amounted to one of murder, and respited the sentence, informing the prisoner that, so far as it lay with him to say so, he need be under no apprehension that his life would be forfeited.

Legal Intelligence.—*The Queen v. Christie.*—This extraordinary case lately came before Mr. Under-Sheriff Abbott and a jury, at Newington, to determine the amount of property owned by the defendant, which was available to meet the heavy penalties to which he was liable for frauds committed on the revenue, under an extent from the Crown. The defendant was a dealer and manufacturer of spirits, carrying on his business in the South-wark-bridge-road, and under a recent regulation, spirits, when mixed with naphtha, were allowed to be sent out at a nominal duty; but in this case it appears that for some years he had sent out the spirits pure, and thus evaded a duty of about 1*ls.* on every gallon. The warrant having been read, charging the jury to inquire as to the amount of property of which Alexander Christie was possessed, and the debts due to him on the 17th February last, a jury was sworn, of which Mr. John Wood was the foreman. Mr. Welsby, in opening the case, stated that Alexander Christie was an extensive dealer in spirits, and also a manufacturer of methylated spirits, which was a compound of spirits used for varnish. In carrying on that business he was guilty of numerous frauds, and an information was filed against him by the Attorney-General in the Court of Exchequer, under which penalties were claimed for upwards of £300,000, there having been a positive loss to the revenue of more than £15,000 annually. The defendant had allowed judgment to go by default, and this writ was issued on the part of the Crown for the purpose of ascertaining of what property he was possessed, or what debts were due to him at the time of issuing the warrant of extent from the Crown. After hearing the evidence of several witnesses the jury returned as their verdict, "That Mr. Alexander Christie was entitled to certain equitable reversions, but the value of them they were unable to state." This verdict was embodied in a legal form, and the proceedings terminated.

Action for alleged Damages from Alkali Works.—At the Worcestershire Lent Assizes, on the 7th and 8th inst., an action was brought by Samuel David Downing against Richard Lucas Chance and others, to recover damages for their having allowed to escape from their alkali works a quantity of hydrochloric acid gas, that had done damage to his hedges, the foliage of his trees, and his wheat and other crops. The defendants pleaded—first, as to the wheat and crops, not guilty; second, as to the residue, that £14 was sufficient to pay, and they had paid that amount into court. The plaintiff was the owner in fee-simple of a farm at Rood End, Oldbury, about a thousand yards from the alkali and soda works of the defendants. The theory of the plaintiff was, that in the manufacture of soda from common salt, it was necessary to liberate the chlorine, which was done by pouring sulphuric acid over the salt, when the chlorine combined with hydrogen, and escaped in the form of hydrochloric acid gas. The gas was so noxious to vegetation that, in order to save themselves from lawsuits, the manufacturers of soda destroyed the gas by passing it through condensers, which were high towers filled with coke, and at the top of which were tanks, from which water was allowed to trickle through the coke. This was a tedious operation; and sometimes, either through the idleness of servants or from other causes, the gas was allowed to escape into the open air. This, it was maintained, had been done on several occasions from the defendants' works, in July and August last, to the consequent injury of the plaintiff's property. Among the witnesses who were called to support the case of the plaintiff, was Mr. Alfred Bird, practical chemist, of Birmingham. He had been to Rood End on the solicitation of the plaintiff, and professionally. When there, he saw sufficient to satisfy him that the vapour came from Messrs. Chance's works. He took a sheet of filter paper, soaked it with ammonia, and hung it on a line where the vapour came in contact with it. When the excess of ammonia was dissipated, he took the paper down, wrapped it up carefully, tested it with nitrate of silver, and produced chloride of silver, which showed that he had caught hydrochloric acid gas in the paper. On the same occasion he followed the vapour right up to the works of Messrs. Chance, and in that line of route the vegetation appeared completely blasted. He was sure the vapour was not chlorine, but hydrochloric acid.—Mr. W. M. Williams, another chemist, of Birmingham, who is also a Fellow of the Chemical Society, and lecturer on theoretical and practical chemistry at the Birmingham and Midland Institute, gave similar evidence to that of Mr. Bird. He saw the precipitate obtained by Mr. Bird on the occasion of his test, and after several days it had the purple hue which was taken by chloride of silver on lengthened exposure to the air.—For the defendants, it was maintained that the tests did not satisfactorily prove that the offensive gas was hydrochloric acid gas, or, even if that were so, that it had come from the works of Messrs. Chance, which were surrounded with brick-works, iron-works, and phosphate-works. Gas was generated in the manufacture of soda, and Messrs. Chance had made compensation for injury done to the crops without being compelled to do so by a lawsuit; but in 1860, at a cost of £4,000, they made great improvements in the mode of condensing the gas, and since April, 1861, all escape of gas had been impossible.—Mr. Rayner, the manager of the works, deposed that there had been no escape of gas since last April. There was now no communication whatever between any of the chimneys, and the cistern from which water trickled down the coke in the condensing tower contained a thirty-hours' supply. The gas that was not perfectly condensed was drawn to a furnace, which sent it back to a condenser, until it was completely de-

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stroyed.—Dr. Francis Wrightson, analytical chemist, of Birmingham, who had studied under Liebig and Bunsen, and who took his degree in 1852, deposed, from examinations which he had made at the defendants' works, that the condensing towers were fully adequate to condense the fullest amount of the hydrochloric acid gas that could be set free from the furnaces. A slightly alkaline vapour escaped from the long chimney, which could not of course contain any acid, and that vapour might be mistaken by unpractised persons for hydrochloric acid gas. The precipitate found by Mr. Bird would be precisely the same as he described if it were sal-ammoniac, and not hydrochloric acid.—Dr. Voeleker, Professor of Chemistry at the Royal Agricultural College of Cirencester, had visited the works of Messrs. Chance, and was of opinion that the condensation of the hydrochloric acid gas was perfect. In a neighbourhood where there were twenty brick-kilns, chlorine (by the process of bleuing) would be given off in large quantities.—Dr. Alfred Hill, the public analyst to the borough of Birmingham, visited Messrs. Chance's works in August and October last year, and in February and March this year. On each occasion he examined the condensing towers, and found that there was no escape of gas.—The jury, after an hour's deliberation, found that the wheat of the plaintiff had been damaged by the escape of hydrochloric acid gas from the works of defendants; but that the works of defendants were such as were allowed by law, were situated in a fit place, and were properly worked. A verdict was entered for plaintiff for the amount claimed, and leave was given for the defendants to move that the verdict be entered for them.

A Druggist's Assistant charged with Manslaughter.—At the Staffordshire Assizes, on the evening of the 12th instant, Edward Richard Perks, assistant to Mr. F. W. Piper, of Lichfield, surrendered to his bail, and was placed in the dock before Mr. Baron Channel, charged on a magistrate's, and also a coroner's warrant, with the manslaughter of Thomas Winter. The evidence adduced was fully corroborative of the facts as given in the *Chemist and Druggist* last month, in the paragraph relating to poisoning by "Turpeth mineral." The defence was, that when Arthur, the schoolmaster, asked for "Ethiops mineral," he said he wanted it and cream of tartar "for dogs;" and that the prisoner, knowing that Ethiops mineral was not used for dogs, but that Turpeth mineral was, went down into the cellar where the deadly poisons were kept, and fetched up the Turpeth mineral. To guard, however, against its misuse, he put a "poison" label on the bottle in which he sold it to Arthur. Still, with the "poison" label he put one of "Ethiops mineral." This he did, it was argued, because he had reason to believe that the drug was also required by the deceased for a purpose that he was not desirous his sister (who lived with him) should know of. Ethiops mineral was nowhere noticed as a poison; but Turpeth mineral was so virulent a poison, that 10 grains would kill a man. The learned Baron said, in summing up, that there would be no excuse for the prisoner in giving one mixture for another, unless he understood that it was for dogs. The jury, after a quarter of an hour's consultation, acquitted the prisoner.

Police.—Chemistry and Crime.—A travelling letter sorter, employed in the mail carriage between Belper and London, has just been committed for trial for stealing a letter containing money and eighteen postage stamps, which had been prepared by Mr. Jeffrey, an inspector, as a test letter. The prisoner, when charged with the theft, declared he had seen no such letter. He was searched, and eighteen stamps were found upon him. They had been screwed up so small as to be hardly perceptible, and so had been disposed in the corners of his pockets. He said that he had bought them two days previously to send to his sister. There was no perceptible mark upon them, but the application of a chemical test brought out some marks which Mr. Jeffrey had inscribed on them in a fluid which had remained invisible until so treated. By this means Mr. Jeffrey was able to identify the stamps as being the same which he had placed in the missing letter.

Thomas Williams, a porter, aged twenty-two, has been sentenced to three months' imprisonment with hard labour for robbing his employers, the London Stereoscopic Company. A few days ago, from information they received, they were led to believe he had been robbing them. He was called from his work and questioned on the subject, when he confessed to have stolen thirteen ounces of nitrate of silver, or, he added, it might be more, belonging to them. The value of it was about £2 12s. at the ordinary retail price of 4s. an ounce. He also admitted he had robbed them of four valuable lenses, pledging them afterwards at so many different places, and giving at each a false name and address. They were worth from 12s. to 21s. apiece, but he had pawned them for a few shillings, scarcely a tithe of their value. He likewise confessed to several minor thefts of chemicals used in photography.

An Apothecary Convicted of Practising as a Surgeon.—At the West Bromwich Petty Sessions, on the 1st instant, Mr. Frederick Lewis, a medical practitioner, of Hill Top, was summoned by Mr. Bemington, plumber and glazier, of the same place, for having wilfully and falsely assumed the title of surgeon, and represented himself to

be duly qualified and registered as such. It appeared from the statement of the counsel for the informant, who was a member of a friendly society, known as the "Lewisham Court of Foresters," the meetings of which were held at Hill Top, that the defendant had acted as surgeon to that society, but that he was only a licentiate of the Apothecaries' Society. The rules of the association required that the medical officer should be a registered surgeon; and the certificates of the medical officer, which the defendant signed, had printed upon them the word "surgeon." It was maintained that, according to the 40th section of the "Act to regulate the Qualifications of Practitioners in Medicine and Surgery," the defendant had laid himself open to a penalty, upon conviction, of £20 for each offence proved. The informant, it was added, had openly disputed defendant's qualification at the meetings of the benefit society in question, and that defendant afterwards served him with a writ, preparatory to a *Nisi Prius* trial. Evidence was given in support of this opening. For the defence, the defendant's solicitor cited the case of "Ellis v. Kelly," an appeal, tried in the Court of Exchequer, in November, 1860, in which it was held that the assumption of the title of doctor, implied by a brass plate upon the door, was not a wilful misrepresentation under the act, as it was shown that the party accused held a diploma from a Bavarian university. As the defendant was qualified to practise as a medical man, it was maintained that the using of the term "surgeon" was no falsehood. The bench was invoked not to prejudice the position of the defendant, who had already instituted proceedings in a law court to establish his right to practise. An American diploma, which the defendant held, was put in. Lord Calthorpe, who was the chairman of the magistrates presiding, said the bench was sorry to have to come to the conclusion that Mr. Lewis had rendered himself liable to the penalty set forth in the act. He had apparently rendered himself very acceptable to the members of the club, but a conviction under the information must ensue. They would, however, only inflict a fine of £1, and the costs of summoning witnesses. In reply to the application of Mr. Lewis's solicitor, the bench granted "a case."

Miscellaneous Jottings.—We learn from the report of the examination of Mrs. Pridmore, at the Marlborough-street Police Court, that one of the sufferers by that poor lady's kleptomania is a perfumer of the Strand, who involuntarily contributed a quantity of soap and sent to the accumulated spoil found at the prisoner's lodgings.

Homeopathy seems to be going ahead among the Yankees. In the Senate, on the 11th ult., a petition in favour of homœopathic practice in the army, signed by 25,315 persons, was presented.

In announcing the death of Dr. Mackay, the botanist, the *Dublin Medical Press* says:—"He truly loved his art, and the results of his untiring labours and his 'Flora Hibernica' show that he cultivated rather the more practical divisions of botanical science than the microscopic school of vegetable physiology, which eclipses, in these days, the 'culling of simples.'"

Luckombe v. Ashton.—This case was heard at the Court of Queen's Bench on the 21st ult. The plaintiffs were Messrs. Luckombe and King, who carry on business on Snow-hill, as chemists and druggists, under the style of Messrs. Hodgkinson and Co., and they brought the present action against the defendants to recover the sum of £417 12s., being the balance of their account for medicines supplied for the use of the Blenheim Dispensary, an institution which had become first indebted, and then defunct. The defendant, Mr. Ashton, was surgeon and sub-treasurer, and the other defendant, Dr. Wain, of Grafton-street, was one of the physicians to the institution; but, though they admitted that the goods had been supplied by the plaintiffs on the orders of the committee, of which the defendants were members, they denied that they were personally liable, and contended that the medicines were supplied on the credit of the funds of the institution only. The jury found for the plaintiff for the amount claimed—viz., £417 12s.

Mr. James Robinson, the celebrated dentist, and founder of the National Dental Hospital, expired on Tuesday last. His death resulted from a severe shock given to his system by an accident. He was the author of one of the best works on dental surgery.

The *Scientific American* states that the Federal Government has issued an order prohibiting the exportation of quinine and opium to Cuba. It seems that immense quantities have been recently sent from New York to Havana, and thence to the Southern States.

A correspondent suggests that there should be a general gathering of members of the Pharmaceutical Society, at a meeting shortly to be convened for the purpose of confirming the alteration of the bye-laws. He says:—"Unless we muster in considerable force, we shall have laws crammed down our throats, without rhyme or reason, just to suit the few."

The paragraph on "Spontaneous Combustion," which we extracted from the *Times* last month, has been proved by the *Critic* to refer to the old-exploded story of 1821, which Dickens quoted in defence of his "Bleak House" case.

THE UNITED SOCIETY OF CHEMISTS AND DRUGGISTS.

THE First Anniversary Festival of this Society was celebrated, with great success, on Thursday, the 27th ult., at the Freemasons' Tavern, under the Presidency of Mr. Alderman Dakin, when about one hundred gentlemen were present, among whom we recognised James Burgoyne, Esq., Henry Matthews, Esq., F.C.S.; Joseph Dakin, Esq., Alfred Preston, Esq., William Vaughan Morgan, Esq., Charles Linder, Esq., and others.

After the ordinary loyal and constitutional toasts had been proposed and enthusiastically responded to,

The CHAIRMAN said—Gentlemen, I ask you to drink the toast of "Free Trade for Chemists and Druggists, and protection from unnecessary legislative interference" (loud cheers). The toast that I have just read is quite sufficient, without my saying a single word upon the subject; indeed we Englishmen have all pretty well made up our minds on the question of free trade (cheers). To fetter in any way the progress of trade and its self-adaptation to the wants of society, is most mischievous and unnecessary. Let each country produce its own peculiar products, and exchange them as if they were counties under one government (hear, hear). That is sound doctrine, and applies to our own particular case, and if carried out would enable us better to fulfil the duties which fall upon us. It is one of the objects of this Society to give a point of union to the body to which we belong, round which they may rally—a body consisting of 50,000 men, not the least educated, and not the least intelligent, of those engaged in trade in this great country (hear, hear). Hitherto we have had no bond, no point of union, such as it is the peculiar province of this Society to afford. The Society was inaugurated about this time last year with great success, and you have had all the details of the arrangements laid before you this morning. I am told that already 1,200 members of the trade are associated together by means of this Society (cheers). When you consider that this has been done in one year, you may think from this beginning what may be done in time to come, if we act, as our Committee have hitherto done, with prudence, judgment, and propriety in the conduct of the matter (hear, hear). I wish to see a greater part of our body united for the protection of their common interests, and for defence against any aggression made upon them (hear, hear). It is with this object that I give you the toast of "Free Trade for Chemists and Druggists, and protection from unnecessary legislative interference," with which, if you please, I will couple the name of Mr. Abblitt.

The toast was received amid applause, that lasted several minutes.

Mr. ABLITT, in responding, said—Gentlemen, it has been said that nothing can be properly done in England without a good dinner, and we have now had a very good dinner. so therefore we must consider our Society to be established on the most solid basis possible (cheers and laughter). There are now 1,200 of us combined together, and I trust that in time to come when we, the founders of the Society, have passed away, the chemists and druggists will all be found united together in a body. If we want an instance of what such a body can do, let us look at that noble institution, the Masonic body, and see what union and utility there is there displayed. Why should not we, a few humble individuals, found a similar institution, so that our successors may have good reason to bless the occasion that we united together, and held the first public dinner that was ever held among the members of our trade in London? (cheers). One of our first propositions was to watch and to oppose any enactment that might be made affecting our interests, and to advocate free trade for chemists and druggists, and protection from unnecessary legislative interference. We hail free trade. We don't want protection (loud cheers). Why should we not prosper under free trade? I can't tell, and I should like to see the man that could inform me (cheers). I don't think that any body of men is so respected as that of the chemists and druggists. From an experience of upwards of thirty years in London and the country, in both the wholesale and the retail trade, I may say, from the first day to the present time I have found the chemists and druggists looked up to by the poor in every part as a class of tradesmen whom they come to consult in all sorts of matters, not only in cases of disease, but to obtain their advice for everything that can be thought of. They consult us about their children going to school, about their fathers, their mothers, and their grandfathers (laughter). Under these circumstances, I contend that we require free trade in dispensing our drugs at the same time that we give them recommendations as to what is best for them to use, and what is best for them to abstain from (hear, hear). Although there are those among medical men who would exclude us from recommending one drug in preference to another, I think we may say that we are in reality the poor people's doctors (loud cheers). Our right to this title appears to be well founded and within certain bounds. We supply an acknowledged public want on easy terms, unlike the doctors, as was shown by the doctor's bill which appeared in the *Daily Telegraph* the other day, where a poor man must have been dreadfully dosed. He died, as a matter of course;

but before that event came to pass he received fourteen weeks' medical attendance, comprising 218 visits, at 5s. each; 673 draughts, at 1s. 6d. each; 54 boxes of pills, at 1s. each; 2 powders, &c. &c., which amounted altogether to no less a sum than £111 4s., including a charge of 10s. 6d. for the certificate of his death (great laughter). Now, the poor people come to us and say, "We want so and so; and we give them so and so, and sometimes we say, "Why don't you go to a doctor?" And they reply, "We like to come to you for a small dose, as the doctors charge so much for what we can get from you for so little" (hear, hear). Therefore we wish to protect the right of the chemists to do that which the wants of the poorer classes thoroughly justify; and I think you will agree with me, that we are doing good as far as our limited powers allow us, and that we are assisting the poor materially in protecting their pockets. We don't require legislation, but we must educate ourselves (hear, hear), so as to supply the public with genuine medical knowledge at a cheap rate (hear, hear). Just look at the absurdity of the "Sale of Poisons Bill." If a person comes to us for a drachm of arsenic, we can't supply him; but if he wants seven pounds, then we can supply him. If a poor woman wants a pennyworth of sugar of lead for a lotion, we are told we must not sell it, because we are not sufficiently educated (ironical cheers and laughter). I beg to conclude by thanking you for calling upon me to return thanks for the toast in the presence of my seniors in trade, education, and position (loud cheers).

The CHAIRMAN, in giving the next toast, said—Gentlemen, I must ask you to drink in a bumper the toast I am about to give you, of "Prosperity to the Benevolent Fund" that we propose to form in connection with this Association (cheers). Gentlemen, what great results have arisen from small beginnings! We are about to inaugurate to-night the first little streamlet, that we hope will hereafter be joined by many tributary streams, and form at last a mighty river, which may afterwards float those of our trade who may be unfortunate and deserving. We are, I believe, about 50,000 strong; and in so large a body it is not vouchsafed to all to be fortunate. Some of us may experience calamity without expecting it, and without any fault of our own, and under such circumstances as to give us a right to depend upon the commiseration and help of our fellows (hear, hear). Now, surely a body like ours, which has been very well described by my friend who has just sat down, as ready to help others and to give them our advice, help, and sympathy on all occasions, should be equally ready to give that help, sympathy, and advice to each other (hear, hear). I believe we are very faithful auxiliaries to the medical body—than whom no body of men give more of their time to the poor, and no body are less perfectly paid (cheers). It is impossible we can give individually effective help, and our small annual subscriptions and donations would, if singly applied, go but a little way towards relieving distress; but when they are gathered together in one common fund, and well managed—as I believe it will be, as it will be under your own management and control (hear, hear), at very little expense—they will be available to relieve the necessary cases—the more prominent cases at first—before the fund becomes large, and when it increases you can gradually extend your operations. I am sure the proposal will recommend itself to your best feelings, and that you will give it your heartiest support (loud cheers). Here we are all warm and comfortable, under the genial influence of a good dinner (laughter), and thankful to a beneficent Providence for our health, our success, and our happiness; but we must not forget those cloudy days that may come to ourselves individually, and which are sure to come to some among us. I don't think I need say much more to you to commend the establishment of the Fund. I trust that the 1,200 members of this year will soon become 12,000 (loud cheers), and that we shall go on adding to our power until I hope that before very many years are passed we may be able to single all out who are permanently unfortunate, and to stretch forth the helping hand of charity towards them; to dry the tear of the widow and the fatherless, and to comfort those who are left by the mysterious ways of Providence without the natural means of support (loud cheers). I know that the other body of medical men have established a very effective Society of this kind—the Medical Benevolent College, which is doing great things for the unfortunate. It was only last year that a friend of mine, in the full enjoyment of health, of comparative youth, and in very excellent practice, was struck down, leaving a wife and seven children with very little but a small life policy to live upon, when that society stretched forth its hand to assist the widow in her affliction, and she has now £50 per annum, and I can assure you I had great pleasure in putting one of her children into Christ's Hospital (loud cheers). As it is in their body, so will it be in ours; those who behave well and are unfortunate will find that a kind Providence will raise them up friends on the right hand and on the left. At all events, let us do our part in the good work, and in contemplation of your hearty response to our appeal, I propose to you to drink "Success to the Benevolent Fund."

The toast having been enthusiastically received,

The SECRETARY (Mr. Buott) proceeded to read the list of subscriptions and donations to the Benevolent Fund, which amounted altogether to the sum of £222, of which Messrs. Morgan Brothers, of Bow-lane, contributed no less than £100. The announcement of the amount was received with loud cheers.

The CHAIRMAN, in proposing the next toast, "Success to the Pharmaceutical Society, and the promotion of voluntary Scientific Education," said he was sure they did not wish it to go forth from that place that the Association they were engaged in forming that night was intended to be antagonistic to the Pharmaceutical Society (loud cheers, and cries of "No, no"). That society sought to elevate chemists and druggists, and was instrumental in raising the scale of their intellect; by imparting to them sounder chemical and professional knowledge (hear, hear). Some of them had derived advantage from that society, and the young man coming up to London from the provinces, as well as those in London, might derive great advantage from it. It would be a great inducement to those young men who come up to London from the country to the wholesale houses to lay the foundation of an accurate scientific education. He trusted, therefore, that there would be no jealousies on either side (loud cheers), as both societies were formed for the advantage of the trade. The chemists and druggists had clear and well-defined notions of their own usefulness. They would be happy to admit any one who chose to join them, and they had no objection to act with the other society, so long as the greatest good was done for all (hear, hear). He hoped from this auspicious commencement of their very important institution, that it would be forwarded and helped on in every way by the influential and intelligent members of their profession (cheers). He hoped he should see the wholesale houses following the noble example of his friend on his right (Mr. Morgan) (cheers), who had so well exemplified what the true spirit of benevolence could do (loud cheers). In giving them the toast, he would couple with it the name of Mr. Wade.

The toast having been well received,

Mr. WADE, in responding, said it might appear rather singular that he should be selected to return thanks for the toast that had just been drunk, but people's best friends were often found in places where they were least expected. Certain slanderous reports had gone forth that they were opposed to the Pharmaceutical Society, which he begged to contradict. Was it not sufficient that they had at their head one of the staunchest advocates of progress, education, and freedom? (hear, hear). Why had they originated the United Chemists and Druggists' Society? Because the laws and constitution of the Pharmaceutical Society had failed to fulfil the objects intended (hear, hear). Those laws and constitution were intended to constitute the chemists and druggists into one constitutional and independent body, and to take measures for protecting their general interests. In that they had failed; the profession of the chemists and the trade of the druggists, although combined, were different elements, that had separate rights, and which required separate advocates (hear, hear). There were about ten thousand chemists and druggists in the kingdom who had shops, and who were nothing but druggsters, and who would not be benefited by the Pharmaceutical Society. The Pharmaceutical Society must be the college of the chemist, and the United Society must be the protector of the trade interests and the supporter of the aged and the distressed (hear, hear). Of the 15,000 druggists established in business in this kingdom, 10,000, who had no element of the profession in them, had no support to look to in the time of distress, as they had no claim upon the Benevolent Fund in combination with the Pharmaceutical Society, and no one to protect their trade interests when assailed. Therefore let the Pharmaceutical Society confine itself to professional matters, and leave the trade interests to be guarded by the United Society, which would then co-operate with them heart and hand (hear, hear). Then, he said, all honour and success to the Pharmaceutical Society, and he trusted it would send forth all its strength in its proper sphere (hear, hear); but he trusted that it would not ignore or seek to intimidate the druggist. The Pharmaceutical Society represented the one, and the United Society was the representative of the other. He wished the Pharmaceutical Society hearty success, and in saying so he believed he spoke for the whole body to which he belonged (prolonged cheering).

The CHAIRMAN, in giving "The Wholesale Houses in London," said the wholesale and the retail houses were bound up together, and the wholesale houses best consulted their own interests when they did everything they could to support the position of the retail traders, especially in such laudable objects as those for which they were then assembled (hear, hear). They had Mr. Burgoyne, his brother, Mr. Joseph Dakin, and Mr. Preston, and they had also his friend, Mr. Morgan, whose deeds said more for their intentions than he could (loud cheers). He hoped that this sprinkling of the wholesale trade would be much larger in future (hear, hear). He knew they would only be too glad to give a helping hand to anything so laudable as the objects of this Society, and he commended it to their best notice, with gratitude for the present, and hope for the future. He begged to give "The Wholesale Houses" (loud cheers).

The toast having been drunk,

Mr. BURGOYNE, in responding, expressed his regret that the wholesale trade was not better represented among them on that festive occasion, but attributed the non-attendance to some little misunderstanding with respect to their constitution. He felt sure that when the matter came to be properly understood, the wholesale houses would not be backward in coming forward (hear, hear). He was glad to see such a gathering as there was that

night, and he trusted that the prospects of the Society would improve year by year (cheers).

Mr. HEPPLE said he thought he was a little out of order, but he was sure he should be excused when he suggested the health of Mr. Morgan and the other honorary members (cheers).

The CHAIRMAN said he believed Messrs. Morgan were down for the tenth toast, but wherever their names were placed he was sure that the toast would be received as "number one" (loud cheers and laughter). He was very glad the toast had been proposed spontaneously. He begged to give them "The Health of Messrs. Morgan and the other honorary members" (cheers).

The toast was drunk amid great applause.

Mr. WM. VAUGHAN MORGAN, in responding for himself and the other honorary members, said that they were present on that occasion not for any benefits that were likely to accrue to themselves from the Society, but to show that they approved of the object for which they were assembled (loud cheers). The only advantage they derived from being there was that of eating a good dinner, and suffering from a fit of indigestion in consequence of eating that good dinner (cheers and laughter). They sincerely believed that the object of the Society was good, and the time would come when others situated like himself, either directly or indirectly connected with the trade, would contribute to their funds (cheers). He was a great believer in individual exertion; unless they helped themselves, neither the wholesale trade nor anybody else would. He himself had only promised to give his £100 towards the Benevolent Fund, in case the trade took the matter up, and 1,000 members joined the Society within the six months. When he found that at the end of that time there were only 400 members, he told them that they should have no assistance from him. Since then, however, the eyes of the trade had been opened, and he had now great pleasure in finding that the number he had mentioned had not only been come up to, but had been greatly exceeded, and he had accordingly given neither more nor less than his original donation (loud cheers). He thought that other honorary members of the trade could afford to give handsomely towards their fund, and he was certain that they would come forward when they saw the trade itself taking an interest in the matter. He was quite an outsider himself, but he should be very happy to aid them in every possible manner (loud cheers).

The CHAIRMAN gave "The Progress of Analytical Chemistry."—They were all very much interested in the subject of the toast, either as practical or scientific men, or as both, and on it the progress of the arts and sciences in this country very much depended (hear, hear). He begged to couple with the toast the name of Mr. Matthews, whom he was glad to recognise as a member of the Society (cheers).

Mr. MATTHEWS, F.C.S., said—A number of persons of much higher position in his profession took a great interest in this Society, with which, he trusted, they would soon become better acquainted (hear, hear). Chemistry had certainly a great deal to do with the prosperity of this country, and great progress had been made in it lately. Mauve and magenta had been produced by its aid from coal tar, and other equally wonderful discoveries had been made.

The CHAIRMAN then gave "The Press," the fifth estate.

Mr. HOLLINGSHEAD responded.

The CHAIRMAN then gave "The Treasurers, Auditors, and Secretary of the United Society," to which Mr. Linder responded.

The CHAIRMAN, in a few appropriate words, proposed the health of the Vice-Presidents, connecting with it the name of Mr. Preston.

Mr. PRESTON, in responding, said that he was himself shut out from the Pharmaceutical Society, although his partners were in it. He very much approved of this Society, and he trusted that from small beginnings great ends would arise (hear, hear).

Mr. SULLY, in proposing "The health of their President, the Chairman," said—When they and their children had passed away, the name of their first President should still be remembered with affection by those who were then connected with the Society (loud cheers). He had never heard of an angel being an alderman, but he was convinced that an alderman could be an angel (cheers and laughter).

The toast was drunk with three times three.

The CHAIRMAN, in responding, said—He trusted that hereafter this Society would prove a great success (cheers). His friend had made an angel out of an alderman, and all he could say was, that if ever he could take a bright flight, it would be upon such an occasion as this (loud cheers). The greatest of all luxuries was that of doing good, and it was for that luxurious purpose they had met that night (cheers). The time would, perhaps, come when they would not so much regard what they had done for themselves as what they had done for others (hear, hear). He felt very much honoured in being elected their President, but he had not accepted the position so much out of love for the honour as for the purpose of being effectively useful (loud cheers).

The CHAIRMAN then gave "The Country Members," coupling with the toast the name

of Mr. Bull, of Royston, whom he was very glad to see present, and he hoped in time to see a much larger number of country members in attendance on future occasions (hear, hear).

The toast having been duly honoured,

Mr. BULL responded, and trusted that the Society would number, in a short time, thousands instead of hundreds.

Mr. WADE, in proposing "Absent Members," said that no one knew who the parents of this Society were, but at all events it was a legitimate offspring (laughter). It was nursed by strangers and spurned by its rich relations, who, however, now began to find that it was not so ugly a "bairn" as was thought (laughter). And he begged to couple with the toast the name of Mr. Buott, Sen., their travelling agent (hear).

Mr. BUOTT, Sen., in responding, expressed his regret that distance and stern necessity caused the absence of many whose hearts were with them. He said he had visited about sixty towns, as the Society's agent, and was rejoiced to find so decided a feeling in their favour. His statement of the principles of the Society had been listened to with much interest and the kindest attention, and had resulted in the adhesion of upwards of two hundred members in the Manchester district alone. In some towns every member of the trade had joined them, and in all the others he had visited the majority had espoused their cause. The establishment of the Society was only a work of time. Their fellow tradesmen, of whom there were 50,000 throughout the country, felt the want of such an institution as a bond of fellowship and a ground of benevolent action. His short tour in the provinces had far exceeded the expectations of the Committee, and the towns already won to their cause were so many pledges of success in others. He was much gratified with the approbation of his efforts so warmly and unanimously expressed, and should be ever happy in devoting himself to their service (hear, hear).

The CHAIRMAN then gave "The Committee," coupling the toast with the name of Mr. Anderson.

Mr. ANDERSON responded.

The "Medical Profession" was then given, which was responded to by Mr. Freston.

In the course of the evening a capital selection of music was given under the direction of Mr. Fielding, Vicar Choral of St. Paul's Cathedral, assisted by Miss Annie Walker, Mr. F. Walker, and Mr. Shoubridge; Mr. Shoubridge, jun., presided at the piano, and altogether the arrangements were productive of general gratification.



To the Editor of the Chemist and Druggist.

UNITED SOCIETY OF CHEMISTS AND
DRUGGISTS.

SIR,—In reply to many inquiries, will you kindly allow me to state that the Committee of this Society propose shortly to forward to each member his certificate of enrolment in a form suitable for framing.

The copy of the Annual Report and Statement of Receipts and Expenditure will also be issued in a few days; in the meantime, the Committee will be glad to receive the membership fee (5s.) for the year 1862, either in postage stamps or post-office order.

I am, Sir,

Your obedient Servant,

C. F. BUOTT,

Secretary.

Offices, 2, Bell Yard,

Doctors' Commons, E.C.

CHLORODYNE.

Manchester, March 11, 1862.

SIR,—Enclosed you will receive a small sample of my chlorodyne (prepared February 27) for your inspection.

The silence with which I treated the many inquiries in your Journal, after publishing the

formula (through the kindness of Dr. Ogden), arose from the extreme difficulty I felt in producing an article that would bear inspection; a result which has only been arrived at after repeated experiments, and by much patience. You will see by the advertisement I make no great pretensions; all I court is a fair, impartial examination, and comparison with other preparations in the market under the same name.

The largest size bottles put up for chemists' use (the cost being 1s. the ounce) will bring it within the reach of ordinary prescriptions without additional charge.

I remain,

Yours respectfully,

A. P. TOWLE.

[The formula communicated by Mr. Towle to one of our early numbers was much criticised at home and in America, and called forth many interesting articles. To show that we are not wanting in gratitude to our old contributor, we have published the above letter, although it partakes of the nature of an advertisement. We will report upon the liquid sent to us when we have compared it with the products of other makers.—Ed.]



A Costly Recipe.—Several correspondents have called our attention to an absurd error in the formula for Dr. Cumming's Glycerine Ointment, given in our January number (page 12), namely, the substitution of the symbol of the pint (O) for that of the minim (m). The misprint occurred in the American journal which contained Dr. Cumming's report, and we allowed it to pass uncorrected. We candidly admit that we are much to blame for overlooking so obvious a blunder, but we must request that our friends will not be too hard upon us, and will cease to write ironical letters about "economical preparations." Those who have never had the misfortune to be editors, can have no idea of the amount of worry and work to be got through before a number of a magazine can be issued. When contributions come pouring in faster than they can be read (for authors have a strange habit of keeping their articles back till the last moment), and when the printer's devil persists in dunning you for more "copy," you are almost certain to leave out or pass over something which ought not to be omitted or overlooked. Then come terrible letters from subscribers, complaining of the unfortunate editor's want of courtesy, or pointing to proofs of his ignorance and incapacity. Will some of our friends have the kindness to change places with us for a month? The error which has called forth so many letters, and this editorial plaint, is a most amusing one. Two pints of otto of roses, worth about thirty pounds, with two pints of otto of bergamot, are ordered to be used for perfuming a mixture of two ounces of almond oil, four ounces of glycerine, and six drachms of spermaceti. We trust that our readers will make the necessary correction in ink, as the recipe is really a valuable one. In noticing this Glycerine Ointment, we referred to the Ung. Aquæ Rosæ, and as some of our correspondents seem to be in want of an emollient, we now furnish them with Dr. Parrish's modified recipe for the latter preparation, which produces an article superior to that of the *Pharmacopœia*:—

Unguentum Aquæ Rosæ. Take of white wax ʒj; oil of almonds, f ʒiv; rose-water, f ʒij; borax, ʒss; oil of roses, mʒ. Let the wax be melted and dissolved in the oil of almonds by a gentle heat, then dissolve the borax in the rose-water, and add the solution to the heated oil, stirring constantly till cool; then add the oil of roses, stirring. It is well to warm the rose-water a little, or to add it to the ointment before it is much cooled, thus preventing any granulation of the wax.

Use of Apples in Dyeing.—R. H., a subscriber residing at Bowdon, writes:—"Will you, or some of your correspondents, oblige me by stating if it be true that apples are now used for fixing a dye in the dyeing process?" A very plain answer to this question, which appears to be a common one, has just been published in the *Journal of the Society of Arts*. Mr. W. Symons, in a letter addressed to the editor of that journal, and dated the 6th of February, writes:—"There has been an opinion prevalent, especially in the West of England, that apples have been extensively used in the application of some of the new and brilliant dyes mentioned by Dr. Grace Calvert in his paper; and I have found many well-informed men in the City, as well as the majority of the members of the Society of Arts to whom I have mentioned the subject, fully believe it. You will, perhaps, not think it out of place, in connection with the interesting paper read last night, to allow the *Journal* to be the medium of giving the assertion a distinct denial. Dr. Calvert has allowed me to use his name in stating that it is a complete hoax, but, to show the utility of giving publicity to this statement, he told me the rumour has obtained such general currency, that he has been called on in Manchester by persons who have been thus misled, and have involved themselves in some expense to supply the market with malic acid from some cheaper source, as, of course, may be easily done; but they have found, to their disappointment, that there is no market for the article."

Standard Medical Works.—O. W.'s request, that we should furnish him with a list of the standard works on Chemistry, Pharmacy, Medicine, Materia Medica, Midwifery, Anatomy, and Physiology, with their prices and publishers' names, is one that we cannot comply with. Such a list, to be approximately complete, would fill many pages. If, as we believe, O. W. is about to apply himself to the study of medicine, he cannot select better guides than the excellent manuals published by Churchill, of New Burlington-street, which are used in most colleges. The "Manual of Chemistry" is by Mr. Fownes, and is undoubtedly the most concise general treatise on the science extant. Medicine is expounded by Dr. Barlow; Materia Medica, by Dr. Royle and Dr. Headland; Obstetrics, by Dr. Tyler Smith; Anatomy, by Mr. Erasmus Wilson;

and Physiology, by Dr. Carpenter. Besides these, there are in the same series manuals on Botany, Dental Surgery, Medical Jurisprudence, the Microscope, Natural Philosophy, Ophthalmic Medicine, Pathological Anatomy, Poisons, and Surgery, all of which are written by distinguished professors. The price of each manual is 12s. 6d. The two best works on Practical Pharmacy were reviewed in our first volume (1860), one is by Dr. Mohr and Mr. Redwood, and the other by the Principal of the Philadelphia College of Pharmacy, Professor Edward Parrish.

Balance for Analytical Purposes.—X. Y. Z. asks, "What description of scales is suitable for weighing, for rough analysis in a chemical manufactory, where absolute accuracy is not essential?" He also requests us to give him some idea of the cost of a suitable instrument, and to state where one may be purchased. We are left in ignorance as to whether large or small quantities are to be operated upon, and cannot, therefore, give our correspondent a direct answer. For weighing large quantities, we have used an instrument costing, we think, eight guineas, and supplied by Mr. J. J. Griffin, of Bunhill-row, London, E.C. It has a brass beam 16 inches long, and will carry 1 lb. in each pan, turning when loaded with one-tenth of a grain. A smaller balance, having a gilded steel beam 8 inches long, sold by the same dealer, is a very convenient instrument. It will carry 500 grains, and turn with one-twentieth of a grain when loaded. When in use, it is suspended by means of a polished hard wood support, and when not in use it is placed in a japanned tin case. The price of the complete apparatus is £2 8s. A set of decimal grain weights, Mint standard, from 600 grains down to one-hundredth of a grain, may be obtained for £1 11s. 6d. We thank X. Y. Z. for his excellent suggestions.

Aërated Lemonade. (C. W.)—Into each bottle put 1 oz. or 1½ oz. of syrup of lemons, and fill up with simple aërated water from the machine. The syrup is made by dissolving 30 oz. of lump sugar in 16 oz. of fresh lemon-juice by a gentle heat. It may be aromatized by adding 30 or 40 drops of essence of lemon to the sugar; or by rubbing part of the sugar on the peel of two lemons; or by adding to the syrup an ounce of a strong tincture of fresh lemon-peel.

Ozonized Oil—Condyl's Disinfectant—Soda-ash—Allotropic Phosphorus—French Works.
"An Inquirer," who seems anxious to sound the depths of our knowledge, asks, in one brief epistle, a number of questions which could not be answered at length in half-a-dozen pages of our journal. Though willing to help such an earnest truth-seeker, we are compelled, through want of space, to confine our observations to the chief points of each question. 1. Oils are ozonized by saturation with oxygen gas, and subsequent exposure to the sun's rays for a considerable length of time. The discovery is due to Mr. Dugald Campbell. Ozone is practically insoluble in water. Paper prepared with iodide of potassium and starch is generally employed as a test for ozone, but whether it is applicable to ozonized oil, we cannot say. The salt is decomposed by ozone, and the liberated iodine, coming into contact with the starch, produces the well-known and characteristic blue colour. The amount of ozone is determined by the depth of the tint. 2. Mr. Condyl's patent refers to the use of manganates or permanganates for disinfecting and deodorizing purposes. The salts transfer oxygen with great rapidity to organic particles, and thus destroy their offensive or poisonous qualities. 3. Soda-ash is the name given to a variety of the crude soda of commerce. It is merely impure carbonate of soda in the condition of coarse powder. Formerly it was exclusively prepared by incinerating maritime plants and sea-weeds, and the best sort was known as *barilla*. At the present time, the soda-ash of British commerce is manufactured from sea-salt by Le Blanc's process, which consists in converting the salt (chloride of sodium) into sulphate of soda, by means of sulphuric acid; in converting this product into a very crude carbonate, by heating it with chalk or limestone and coal; and, lastly, in purifying the mass by solution and calcination. 4. The extraordinary modification of phosphorus, discovered by Schrötter, is generally known as *allotropic* or *amorphous phosphorus*. It occurs usually as a chocolate red powder, but may be obtained in a more compact state, as a brown solid mass having a lustrous conchoidal fracture. It is devoid of taste and smell, and may be handled without fear, as it does not become luminous until heated to 392° F., or inflame below 500°. It is procured on a large scale by Schrötter's process, which consists in heating ordinary phosphorus for some hours to a temperature of from 446° to 482° F., in a flask or retort filled with dry nitrogen or carbonic acid gas, and having its beak dipped into a vessel of mercury. A small quantity of ordinary phosphorus is driven over unchanged, but the chief portion is converted in a great measure into the amorphous variety, which may be purified from any admixture with ordinary phosphorus by treatment with bisulphide of carbon, in which the red modification is quite insoluble. 5. The works of reference published by Didot Brothers, of Paris, and advertised in the *Technologist*, are all in the French language. From personal acquaintance with them, we can speak most highly of their merits.

Aqua Melissa. (J. T.)—Put into the still 12 lbs. of the fresh tops with 2 galls. of water, and allow one gall. only to distil over.

Iceland Spar. (M. P. S.)—A crystal of this stone may be polished on a lapidary's wheel of tin, with tripoli and water; or, better still, on a zinc wheel, with putty of tin and water.

Adulteration of Food. (A. Z.)—The few works specially devoted to this subject give results rather than the means whereby the results are obtained. Bailliére, of Regent-street, has published a "Treatise on the Adulterations of Food, and the Chemical means employed to detect them." Price 6s. We have never seen it; but, from the publisher's list, we learn that it contains Water, Flour, Bread, Milk, Cream, Beer, Cider, Wines, Spirituous Liquors, Coffee, Tea, Chocolate, Sugar, Honey, Lozenges, Cheese, Vinegar, Pickles, Anchovy Sauce and Paste, Catsup, Salad Oil, Pepper and Mustard. The little work reviewed in our November number last year forms, perhaps, the best introduction to the study of general chemical analysis. We can also recommend the admirable *Manual of Chemical Qualitative Analysis*, by Northcote and Church, published by Van Voorst. Price 10s. 6d.

Pulv. Conf. Aromat.—R. W. writes:—"Will you oblige by informing a regular subscriber what it is imparts the yellow colour to pulv. conf. aromat.? I mixed some, using hay saffron, but found that it had a whity-brown shade." The yellow tint is due to the saffron; but if no heat be employed, or too much heat, the colour of the article is injured. Dry the saffron with a gentle heat, and rub it through a sieve, having about sixty or seventy holes to the square inch; then put it into a jar, with just sufficient hot water (about 170°, not boiling) to moisten it, and digest for two or three hours; then mix with the chalk, and dry with a gentle heat, frequently turning over with a spatula. Mix the spices with the saffron and chalk until thoroughly incorporated. Lastly, add the sugar gradually, and sift all together.

Tinct. Rhei. Comp. (K. K. K.)—We are not acquainted with any formula superior to the official one in the London Pharmacopœia. We have never met with such a book of synonyms as you describe.

Coating Pills. (S. B.)—Furley's process for rendering pills tasteless was provisionally patented 15th April, 1861, No. 925. We learn from Mr. Brooman that the patent was abandoned; therefore the invention is public property.

The Turkish Bath.—The *Lancet* of last Saturday contains a well-written article on the Turkish bath, and the teaching of its most strenuous advocates. After having noticed the principal fallacies promulgated by Mr. David Urquhart, Major Rolland, and a contributor to the *Cornhill Magazine*, the writer makes the following sensible remarks:—"The application of heat and friction bears no relation to cleanliness; the most perfect cleanliness may be attained by soap and water. The stimulation of the skin to renew its epidermal coat by steaming and rubbing is not a process of cleansing, any more than blistering it, or effecting a similar renewal with tincture of iodine. Nature has been so bountiful and provident as to provide the body with the means of resisting great extremes, whether of heat or cold. The processes of life can only be carried on at a temperature nearly invariable, or varying within very narrow limits. To combat cold climates there is a great power of producing heat internally in the body; and to combat hot climates the body is provided with an evaporating apparatus—the skin. That profuse perspiration which these gentlemen regard with such triumph, is the protest of nature against their hot chambers. It should be their humiliation. If they could carry out their theories, and act upon the body by heat as they would upon meat, they would indeed produce an alteration of temperature in the tissues which would effect a cure of all diseases—a dead cure; their patient would be *mort guéri*. But, fortunately for themselves, they cannot prevent the compensating balance which nature has placed there to oppose great alterations in the temperature of the body. They cannot remove it; but they may overstrain and crack it. The palpitating heart, the rapidly expanding lungs, may yield beneath the strain, and blood may flow, fainting may follow, or death result. This is what medical practitioners know, and would feel themselves culpable if they lost sight of." The writer possibly exaggerates the dangers of the Oriental bath, and of course Mr. Urquhart and his followers will say that he is prejudiced. However, whether his medical opinions be right or wrong, the conclusion at which he has arrived coincides with that of the majority of thinking men. "Nothing," he says, "seems more unlikely and undesirable than that the Turkish bath should ever become the *habut* of a large portion of our population. It could serve no good purpose for healthy men, and would injure very many unhealthy men."

TRADE REPORT.

London, 13th March, 1862.

In Chemicals, rather more business has been done during the last week or ten days, and in some instances, a trifle better prices are paid. Tartaric Acid has sold more freely, and now the quotation is firm at 1s. 8d. Nearly all the common Oxalic has been taken off the market at 8½d. to 9d., and the best is now worth 9½d. to 10d. Sales have been more freely made in Citric Acid, and prices are firmer at 1s. 8½d. to 1s. 9d. Prussiate of Potass continues dull, but there is none to be had under 12½d. More doing in Iodine at 4½d. to 4¾d. according to quality, some seconds having been sold at 4d. Bichromate is dull at the late rate of 8½d. Chlorate of Potass sells more readily at 10¾d. to 11d. Sal Acetos remains quiet at 10½d. to 1s. Soda Ash is steady at 2d. to 2½d. per degree. Sulphate of Copper remains quiet at 33s. to 33s. 6d., and Sulphate of Ammonia at 14s. to 15s. Sal Ammoniac is quiet at 37s. for firsts, and 35s. for seconds. A fair business done in Soda Crystals at £1 10s. ex-ship. Cream Tartar is a trifle firmer, sales made at 127s. 6d. to 130s. for fine. Flour of Brimstone is quiet at 13s. for foreign, and 15s. for English. Bleaching Powder is slow at 9s. to 10s. Canada Pot Ashes are quiet at 35s., and Pearls 34s. 6d. A large business has been done in Linseed Oil, and the price has advanced to 36s. on the spot, and 35s. 6d. in Hull. Turpentine is dull, and the price has receded to 61s. for American, and 61s. for French, which prices are now almost nominal. Saltpetre is again dearer and firm, at 38s., 38s. 6d., for 5 per cent, and under, and British refined 40s. 6d. to 41s. 6d.

The drug market has been more quiet during the past month. Some large sales of Castor Oil, however, sold well at full prices to ¼d. per lb. advance. Large sales have been made in Oil of Aniseed at 5s. 9d. for arrival, and 5s. 11d. to 6s. on the spot, which are lower prices. Oil of Cassia has also sold at 8s. 11d. per lb., which is lower. About 100 bags Timmivelly Senna sold higher prices, some fine quality realising as high as 11½d. to 1s. 6½d., and lower kinds down to 2½d. Some good Bombay sold at 2½d. to 3½d., and Pods 8½d. All kinds of flat and quill bark are 3d. to 4d. dearer, and more doing. Sulphate Quinine is rather higher. Camphor is dull. Some sales of Dutch refined brought 2s. 6d. to 2s. 7d., which is one 1d. dearer. Cubebs have declined 5s. to 10s., 290 bags, part sold at £5 10s. to £5 15s. Star aniseeds are easier. No change in Gum. Some pounds of Siam Sticklac sold at £5 12s. 6d. to £5 15s., which are higher prices. Turmeric is much lower and dull. Large sales of Japan Block Wax made at 56s. China Soy is 3d. to 4d. dearer, sales made 2s. 6d. to 2s. 7d. Cutch is dearer, and large parcels sold. Gutta Percha is higher, and large sales. Saffron is dull, the finest is now 42s. to 44s. per lb. Large parcels of Citronnelle Oil have been sold at 4½ to 4¾ per lb. Aloes without change. Ipecacuanha is firm at 6s. 9d. to 7s. Jalap stands at our quotations. More doing in Cochineal, and in some cases prices are 1d. higher for good grains. In other articles there is no change to notice.

PRICE CURRENT.

These quotations are the latest for ACTUAL SALES in Mincing Lane. It will be necessary for our retail subscribers to bear in mind that they cannot, as a rule, purchase at the prices quoted, inasmuch as these are the CASH PRICES IN BULK. They will, however, be able to form a tolerably correct idea of what they ought to pay.

	1862.			1861.				1862.			1861.		
	s.	d.	s.	s.	d.	s.		s.	d.	s.	s.	d.	s.
ARGOL, Cape, pr ct.	97	6	104	0	95	0	110	6					
French	60	0	.85	0	60	0	.85	0					
Oporto, red	46	0	.60	0	50	0	.52	0					
Sicily	65	0	.80	0	85	0	.90	0					
Naples, white	65	0	.80	0	85	0	.90	0					
Florence, white	90	0	100	0	95	0	105	0					
red	85	0	.87	6	95	0	.97	6					
Bologna, white	115	0	120	0	125	0	150	0					
ARROWROOT,													
duty 4½ per cwt.													
Bermuda .. per lb.	0	10	. .	1	6	1	0	. .	1	5			
St. Vincent ..	0	3	. .	0	52	0	23	0	6				
Jamaica	0	23	0	4	0	23	0	42					
Other West India.	0	2	. .	0	33	0	2	. .	0	33			
Brazil	0	14	0	2	0	14	0	23					
East India	0	14	0	23	0	14	0	23					
Natal	0	8	0	72	0	27	0	62					
Sierra Leone ..	0	23	0	3	0	23	0	32					
ASHES .. per cwt.													
Pot, Canada, 1st sort	35	0	. .	0	31	0	. .	0					
Pearl, do, 1st sort.	34	6	. .	0	31	6	. .	0					
BRIMSTONE,													
rough .. per ton	147	6	150	0									
roll	260	0	0	0	280	0	0	0					
flour	260	0	300	0	330	0	340	0					
CHEMICALS,													
Acid—Acetic, pr lb	0	4	. .	0	42	0	38	0	44				
Citric	1	84	0	1	94	2	0	0	0				
Nitric	0	33	0	4	0	5	0	54					
Oxalic	0	95	0	10	0	84	0	9					
Sulphuric	0	03	0	0	0	02	0	1					
Tartaric crystal	1	84	0	1	84	1	11	0	2				
powdered.	1	87	0	0	2	0	0	2					
Alum .. per ton	135	0	140	0	130	0	135	0					
powder	150	0	0	0	150	0	0	0					
Ammonia. Crb. lb.	0	5	. .	0	6	0	53	0					
Sulphate per ton	270	0	290	0	280	0	290	0					
Antimony, ore ..	260	0	280	0	320	0	340	0					
crude, per cwt	6	0	.23	0	30	0	40	0					
regulus	49	0	. .	0	50	0	0	0					
French star	47	0	. .	0	51	0	0	0					
Arsenic, lump	17	6	.13	6	17	0	. .	0					

PRICE CURRENT—continued.

	1862.			1861.				1862.			1861.		
	s.	d.	s. d.	s.	d.	s. d.		s.	d.	s. d.	s.	d.	s. d.
CHEMICALS.													
Arsenic powder ..	8	0	.10 0	8	6	. 9 0							
Bleaching Powder.	8	6	. 9 6	10	0	.10 6							
Borax, E. I. refined	52	6	. 0 0	0	0	. 0 0							
British.....	62	6	.65 0	65	0	. 0 0							
Calomel.... per lb.	2	10	. 0 0	2	10	. 0 0							
Camphor, refined.	2	6	. 3 0	2	3	. 0 0							
Copras, grn. pr. tn.	60	0	.65 0	65	0	. 0 0							
Crsiv. Sublnte. lb	1	11	. 2 0	2	0	. 0 0							
Green Emuld. pr lb	0	9	. 0 11	0	9	. 1 0							
Brunswk. cwt.	14	0	.42 0	14	0	.42 0							
Iodine, dry, pr. oz.	0	4	. 0 4	0	4	. 0 5							
Magnesia Crbn. ct.	40	0	.45 0	42	6	.45 0							
Calced. lb.	1	6	. 2 0	1	6	. 0 0							
Minium, red, pr. ct.	22	6	.23 0	23	6	. 0 0							
orange.....	35	0	. 0 0	34	0	. 0 0							
Ptsh. Bichrom. lb.	0	8	. 0 0	0	9	. 0 10							
Chlorate.....	0	10	. 0 11	0	10	. 0 10							
Hydriodate oz.	0	4	. 0 5	0	5	. 0 0							
Prussiate .lb.	1	0	. 0 0	1	2	. 1 2							
red.....	2	1	. 2 2	2	2	. 0 0							
Precipit. red pr lb	2	9	. 2 10	2	10	. 0 0							
white.....	2	9	. 2 10	2	10	. 0 0							
Prussian Blue....	1	6	. 1 10	1	6	. 1 10							
Rose Pink.....pr ct.	29	0	.30 0	29	0	.30 0							
Sal-Acetos.....pr lb.	0	10	. 1 0	0	10	. 0 11							
Ammoniac, ct.													
British.....	36	0	.38 0	32	0	.33 6							
Epsom.....	8	0	. 0 0	8	3	. 0 0							
Glauber.....	4	0	. 5 6	4	6	. 5 6							
Soda, Ash, pr deg.	0	2	. 0 2	0	2	. 0 2							
Bicarbonate .ct.	12	0	. 0 0	13	0	.14 6							
Crystals per ton.	90	0	. 0 0	95	0	.100 0							
Sgr. Lead, white, ct.	37	0	.38 0	38	0	. 0 0							
brown.....	27	0	.28 0	28	0	.29 0							
Slphite. Quinine oz													
British in bttl.	7	6	. 0 0	8	2	. 8 6							
Foreign.....	6	9	. 7 0	7	0	. 7 3							
Sulphit. Zinc. cwt.	14	6	.15 0	14	6	.15 0							
Verdigris.....lb.	1	3	. 1 5	1	3	. 1 5							
Vermilion, English	3	0	. 3 4	3	0	. 3 4							
China.....	2	6	. 2 3	2	9	. 0 0							
Vtrl. blue or Romn.													
per cwt.....	35	0	.36 0	33	0	.33 6							
COCHINEAL, pr lb.													
Honduras, black..	2	6	. 4 2	3	0	. 4 10							
silver.....	1	8	. 3 2	2	3	. 3 4							
Mexican, black....	2	5	. 2 10	3	0	. 3 6							
silver ..	2	3	. 2 4	2	8	. 2 10							
Lima.....	2	6	. 3 9	2	10	. 3 7							
Teneriffe, black..	2	6	. 3 4	3	0	. 3 9							
silver ..	2	3	. 2 6	2	7	. 2 1							
DRUGS.													
Aloes, Hepatic, ct.	180	0	.200 0	70	0	.190 0							
Socotrine	160	0	.480 0	110	0	.480 0							
Cape, good	40	0	.42 0	42	0	.47 0							
inferior.....	20	0	.36 0	39	0	.40 0							
Barbadoes.....	60	0	.420 0	40	0	.470 0							
Ambergris, gray.													
per oz.....	35	0	.38 0	34	0	.40 0							
Angelica Root, ct.	20	0	.35 0	28	0	.40 0							
Anised, Chinastr.	70	0	.78 0	70	0	.80 0							
German, &c.....	23	0	.42 0	32	0	.40 0							
Balsam Canada, lb	1	3	. 1 4	1	3	. 0 0							
Capivi.....	1	9	. 1 10	1	11	. 2 2							
Peru.....	4	6	. 4 7	4	5	. 4 7							
Tolu.....	3	10	. 0 0	7	0	. 0 0							
Bark Cascarilla ct.	25	0	.49 0	24	0	.49 0							
Peru crown & grey													
per lb.....	1	2	. 2 6	1	7	. 2 8							
Calisaya, flat....	3	10	. 4 0	4	0	. 4 3							
quill.....	3	6	. 3 9	3	6	. 4 0							
Carthagen.....	0	10	. 2 0	1	2	. 2 0							
Pitayo.....	1	6	. 2 4	1	6	. 2 3							
Red.....	2	6	. 6 0	2	6	. 6 0							
Bay Berries, pr ct.	22	0	.40 0	22	0	.40 0							
Bucca Leaves, lb	0	3	. 1 3	0	4	. 1 3							
Canomile Flowers	40	0	.75 0	45	0	.110 0							
Camphor, China....	220	0	. 0 0	190	0	.195 0							
Canella Alba.....	19	0	.40 0	22	0	.42 0							
Cantharides, pr lb.	2	4	. 2 6	2	3	. 2 5							
Cardamoms. Mibar.													
good.....	4	9	. 5 0	4	7	. 4 9							
DRUGS.													
Cardamoms, inferior	3	10	. 4 8	4	2	. 4 6							
Madras.....	3	0	. 4 9	2	7	. 4 4							
Ceylon.....	4	0	. 4 6	3	6	. 3 10							
Cassia Fistula pr ct.	13	0	.23 0	20	0	.35 0							
Castor Oil, 1st pale, lb	0	5	. 0 7	0	5	. 0 6							
second.....	0	5	. 0 7	0	5	. 0 6							
infr. & dark ..	0	4	. 0 5	0	4	. 0 5							
Bombay, in casks.	1	0	.26 0	1	0	.28 0							
Castorium.....	9	0	.10 0	9	0	.10 0							
China Root, pr ct.	14	0	. 0 0	12	0	.13 0							
Coculus Indicus ..	4	9	. 6 0	4	9	. 5 6							
Cod-liver Oil, gal..	0	4	. 1 0	0	11	. 1 4							
Cleynth. apple, lb.	0	7	. 1 0	0	11	. 1 4							
Colombo Rt. pr ct.	15	0	.47 6	15	0	.47 0							
Cream Tartar, pr ct.													
French.....	127	6	.130 0	135	0	. 0 0							
Venetian.....	127	6	.130 0	137	6	. 0 0							
grey.....	115	0	.120 0	122	6	.125 0							
brown.....	105	0	.110 0	118	0	.120 0							
Croton Seed.....	63	0	.75 0	70	0	.85 0							
Cubebs.....	110	0	.115 0	135	0	.140 0							
Cumin Seed.....	45	0	.48 0	36	0	.40 0							
Dragon's bld. reed.	160	0	.240 0	140	0	.280 0							
lump.....	70	0	.200 0	100	0	.260 0							
Galangal Root.....	16	0	.40 0	26	0	.28 0							
Gentian Root.....	17	0	.19 0	14	0	.15 0							
Guinea Grains,													
per cwt.....	52	0	.55 0	47	0	.48 0							
Honey, Narbonne.	60	0	.85 0	70	0	.95 0							
Cuba.....	28	0	.36 0	34	0	.45 0							
Jamaica.....	26	0	.65 0	40	0	.60 0							
Ipecacuanha, pr lb.	6	10	. 7 0	3	10	. 4 0							
Isinglass, Brazil..	0	10	. 3 10	1	8	. 4 0							
East India.....	0	9	. 3 0	1	4	. 3 8							
West India.....	3	0	. 3 9	3	6	. 3 9							
Russian.....	9	6	.13 0	9	6	.13 0							
Jalap.....	4	0	. 5 0	4	6	. 4 8							
Juniper Berries, cwt.													
German & French	9	0	.11 0	9	0	.9 6							
Italian.....	10	0	.12 0	9	0	.10 0							
Linon Juice, pr deg.	0	0	. 0 1	0	1	. 0 0							
Liquorice, per cwt.													
Spanish.....	83	0	.90 0	83	0	.90 0							
Italian.....	85	0	.95 0	85	0	.95 0							
Manna, flaky	2	6	. 0 0	3	6	. 4 3							
small.....	1	6	. 1 9	2	0	. 2 3							
Musk..... per oz.	20	0	.33 0	26	0	.34 6							
Nux Vomica.....	8	0	. 9 0	8	6	.10 6							
Opium, Turkey....	12	0	.14 9	17	6	.18 0							
Egyptian.....	6	0	.10 6	6	0	.13 0							
Orris Root, pr cwt.	27	0	.29 0	27	0	.29 0							
Pink Root, per lb..	1	10	. 2 2	1	2	. 1 4							
Quassia (bit. wd) ton	70	0	.80 0	75	0	.80 0							
Rhatania Root, lb.	0	5	. 0 8	0	9	. 1 0							
Rhbrb. China, rnd.	0	9	. 2 10	1	0	. 2 0							
flat.....	1	3	. 3 3	1	2	. 2 6							
Dutch, trmd.	3	6	. 4 0	3	3	. 3 6							
Russian.....	11	6	. 0 0	11	6	. 0 0							
Saffron, Spanish ..	42	0	.44 0	62	0	.55 0							

OILS.

DRUGS.	1362.			1891.			OILS.	s. d. s.			s. d. s.					
	s.	d.	s. d.	s.	d.	d.		s.	d.	s.	s.	d.	s. d.			
Vanilla, Mexican lb	25	0	.55	0	30	0.70	Citronel.....	0	4½	0	4½	0	43	0	52	
Wormseed, pr cwt.	2	0	0	0	1	0.0	Clove.....	0	4	0	0	0	44	0	0	
GUM..... per cwt.	2	0	0	0	1	0.0	Croton.....	0	3	0	4	0	3	0	4	
Ammoniac, drop.	90	0	125	0	50	0 100	Juniper..... per lb.	1	10	4	0	1	10	4	0	
lump.....	15	0	.65	0	15	.35	Lavender.....	2	6	5	0	2	6	5	0	
Animi, fine pale.....	300	0	280	0	290	0 310	Lemon.....	5	0	10	6	5	0	10	0	
bold amber.....	200	0	280	0	260	0 270	Lemongrass, proz	0	5	0	6	0	6	0	72	
medium.....	170	0	200	0	170	0 230	Mace, ex.....	0	1½	0	2	0	2	0	24	
small & dark.....	100	0	125	0	100	0 160	Neroli.....	6	0	9	0	6	0	9	0	
ordinary dark.....	40	0	.80	0	50	0 100	Nutmeg.....	0	1½	0	2½	0	1½	0	21	
Arab. E.I., pale pld	50	0	.57	0	50	0.55	Orange..... per lb.	16	6	7	0	7	0	8	0	
unsorb. E.I., good to f	32	0	.45	0	38	0.48	Otto Roses, per oz.	4	0	.24	0	16	0	.24	0	
red and mixed.....	20	0	.30	0	28	0.34	Peppermint, pr lb.	7	0	13	0	7	6	15	0	
siftings.....	0	0	0	0	18	0.23	American.....	33	0	.38	0	35	0	.43	0	
Turkey, pkd, gto f.	105	0	100	0	110	0 150	Rhodium.....	3	9	6	0	3	9	6	0	
second & infr.	40	0	160	0	43	0 105	Rosemary, per lb.	10	0	3	0	1	10	0	3	
in sorts.....	30	0	.40	0	30	0.40	Sassafras.....	3	6	4	0	3	6	4	0	
Gedda.....	32	0	.33	0	26	0.27	Spearmint.....	5	0	12	6	5	0	12	6	
Barbary, white.....	32	0	.33	0	30	0.33	Spike.....	1	3	1	6	1	3	1	6	
brown.....	26	0	.28	0	29	0.30	Thyme.....	1	9	2	6	1	9	2	6	
Australian.....	26	0	.27	0	16	0.18	PITCH, Brtsh, pr cwt.	7	0	0	0	6	0	6	0	
Assafet, fr. to gd.	30	0	110	0	30	0.85	Swedish.....	10	6	0	0	10	3	0	0	
Benjamin, 1st, qual.	400	0	600	0	360	0 650	SALT PETRE, pr cwt.	Engl, 6 c. or under	28	0	.38	6	36	0	.38	0
2nd qual.....	280	0	410	0	160	0 330	over 6 per cent.	36	0	.37	6	33	0	.35	6	
3rd.....	50	0	190	0	60	0 150	Madras.....	35	6	.37	0	32	0	.34	6	
Copal, Angola red.	100	0	125	0	100	0 115	Bombay.....	34	6	.36	0	31	6	.39	6	
pale.....	95	0	105	0	85	0 100	British-refined.....	40	6	.41	0	39	6	.39	6	
Benguela.....	100	0	140	0	90	0 110	Nitrate of Soda.....	14	0	14	0	13	0	13	6	
Sierra Leoneb	0	7	1	9	0	9.1	SEED, Canary, pr qr.	40	0	.50	0	40	0	.52	0	
Manilla pret.....	14	0	.40	0	15	0.43	Caraway, Eng, 6 c.	23	0	.25	0	28	0	.30	0	
Dammar pie, pr ct	38	0	.50	0	46	0.52	German, &c.....	0	0	0	0	26	0	.34	0	
Galbanum.....	140	0	160	0	140	0 150	Coriander.....	15	0	.17	0	14	0	.17	0	
Gnbgco, pkd. pipe	140	0	80	0	120	0 110	East India.....	0	0	0	0	18	0	.16	0	
in sorts.....	0	7	1	6	0	9.1	Hemp.....	44	0	.50	0	44	0	.46	0	
Gnclacum, pr lb.	160	0	210	0	95	0 120	Linsced, Black Sea	57	0	0	0	51	0	0	0	
Kino..... per cwt.	23	0	.26	0	20	0.24	Calcutta.....	59	0	.61	0	50	0	0	0	
Mastic, pkd, pr lb.	6	0	.6	6	8	0.9	Bombay.....	64	0	.65	6	53	6	0	0	
Myrrh, gd & fr pr ct	140	0	180	0	140	0 180	Egyptian.....	57	0	0	0	51	0	.52	0	
sorts.....	70	0	150	0	80	0 130	Mustard, brn, p. bhl	7	0	.10	0	11	0	.15	0	
Olibanum, pl, drop	60	0	.66	0	60	0.70	white.....	6	0	.9	0	0	0	0	0	
amb & v. oil	40	0	.54	0	40	0.54	Poppo, E.I., pr qr.	61	0	0	0	57	0	.58	0	
mixd. & dk.	10	0	.26	0	12	0.26	Rape, English.....	0	0	0	0	0	0	0	0	
Senegal.....	38	0	.40	0	34	.38	Danube.....	40	0	.79	0	60	0	0	0	
Sandrac.....	75	0	105	0	90	0 110	Calcutta, fine.....	68	0	.72	0	58	0	.63	0	
Tragacanth, leaf.	130	0	540	0	190	0 840	Baku, Bay.....	64	0	.69	0	57	0	.63	0	
in sorts.....	100	0	130	0	100	0 126	Teal, Sumatra or Gngy	64	0	.62	0	57	0	.63	0	
OILS..... per tun.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	Cotton..... per ton	150	0	0	0	150	0	0	0	
Seal.....	32	0	.41	0	32	0.40	Gnd. Ntr Knels, tr	350	0	365	0	300	0	310	0	
Sperm, body.....	98	0	0	0	103	0 104	SOAP, Lnd, yel. pr ct.	21	0	.36	0	21	0	.38	0	
Cod.....	32	0	0	0	37	0.0	mottled.....	34	0	.36	0	36	0	.38	0	
Whale, Greenland.	35	0	0	0	0	0.0	curd.....	50	0	0	0	52	0	0	0	
Wh Sea pale	35	10	.36	0	33	10.39	Castile.....	38	0	.40	0	37	0	.40	0	
E. I. Fish.....	30	10	.32	10	29	10.39	Marseilles.....	40	0	.41	0	40	0	.41	0	
Olive, Galipoli, ton.	53	0	.57	0	61	0.6	SOY, China, per gal.	2	2	2	7	2	9	2	10	
Florence, ½-chst.	1	1	1	2	0	16.0	Japan.....	0	8	0	10	1	4	0	0	
Cocoot, Cochn, tr.	50	0	.50	6	51	0.51	SPONGE, Turk f, pkd	20	0	.24	0	20	0	.26	0	
Ceylon.....	49	0	.49	6	49	0.50	fal-to good.....	8	0	.38	6	9	0	.18	0	
Sydney.....	43	0	.49	0	44	0.49	ordinary.....	3	0	6	0	3	0	8	0	
Ground Nut & Gin.	44	10	.45	0	39	0.0	Bahama.....	0	4	1	2	0	3	0	0	
Bombay.....	44	10	.45	10	40	0.0	TURPENTINE,									
Madras.....	44	10	.45	10	40	0.0	Rough, pr cwt.	23	0	0	0	9	3	0	0	
Palm, fine.....	42	10	.43	10	46	0.0	Spirits, English.....	62	0	0	0	31	6	0	0	
Linsced.....	36	0	.36	3	23	0.0	American, inscks	64	0	0	0	31	6	0	0	
Raped. Engl. pale	47	6	.43	6	38	0.0	WAX, Bees, English	165	0	175	0	165	0	170	0	
brown.....	46	0	.46	6	36	6.0	German.....	170	0	180	0	160	0	165	0	
Foreign do.....	46	10	.49	6	39	6.0	American.....	160	0	170	0	180	0	200	0	
brown.....	46	0	.46	6	36	6.0	white fine.....	0	0	0	0	200	0	210	0	
Lard.....	57	0	0	0	63	0.0	Jamaica.....	170	0	180	0	190	0	200	0	
Tallow.....	34	0	0	0	32	6.0	Gambia.....	160	0	170	0	180	0	0	0	
Rock Crude	15	0	.17	0	0	0.0	Mogadore.....	120	0	160	0	125	0	150	0	
Oils, Essential—	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	s. d. s. d.	East India.....	140	0	170	0	150	0	0	0	
Almond essen, lb.	19	0	0	0	30	0.31	ditto, bleached.....	160	0	195	0	170	0	220	0	
expressed.....	0	0	0	0	1	0.0	vegetable, Japan.....	50	0	.75	0	57	0	.85	0	
Anised.....	5	10	5	11	6	7.6	WOOD, DYE, per ton.									
Bay..... pr cwt.	130	0	140	0	122	6.0	Fustic, Cuba.....	160	0	165	0	160	0	160	0	
Bergamott, pr lb.	6	6	.14	0	6	.14	Jamaica.....	105	0	0	0	110	0	115	0	
Cajuputu, bond, oz.	0	1½	0	2	0	1½	Savanna.....	100	0	105	0	100	0	105	0	
Caraway..... pr lb.	4	3	.6	0	4	.6	Zante.....	100	0	105	0	100	0	140	0	
Cassia.....	8	9	0	0	10	0.0	Logwood, Cmpchy	190	0	200	0	130	0	135	0	
Cinnamon (in lb), oz.	1	0	.3	10	3	0.4	Honduras.....	135	0	140	0	0	0	0	0	
Cinnamon Leaf.....	0	2	0	4	0	1.0	St. Domingo.....	140	0	145	0	100	0	105	0	
							Jamaica.....	135	0	140	0	95	0	0	0	



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1885. J. ROBERTSON. *Improved apparatus for the treatment of the human body, or any part thereof, when afflicted by pain.* Dated July 27, 1861.

This apparatus consists of a water-tight vessel, made of tin or other suitable material, inside of which is placed another water-tight vessel of similar construction. The inner vessel is so formed and placed that there is a vacant space between it and the outer vessel at the bottom and sides, and the space at the top between the two vessels is covered in with some watertight material. The mode of using this apparatus is to place such part of the person as is afflicted in the inner vessel, and to fill the space between the two vessels with hot water, by means of an orifice to be left for that purpose, which may be furnished with a funnel, as a convenient means of introducing the water. It is desirable to have a flap turning on a hinge on each side at the top of the inner vessel, which, when fitted with flannel or other suitable material, may, after the leg, for example, has been placed inside the inner vessel, be turned down against the limb with the view of preventing the escape of heat from the limb under treatment. *Patent completed.*

1892. C. C. J. GUFFROY. *Improvements in preparing medicinal substances and compounds from the livers of cod and other salt-water fish.* Dated July 29, 1861.

This invention refers to a previous patent, dated July 20, 1860 (No. 1764), and consists in a method of preparing new medicinal substances and compounds from the watery liquids obtained in or remaining after the extraction of oil from the liver of cod and other salt-water fish. *Patent completed.*

1893. W. L. SCOTT. *Improvements in preparing red, purple, and certain other dyes.* Dated July 29, 1861.

The main feature here consists in the use of binitronaphthaline, as a basis for red and certain other dyes. *Patent completed.*

1935. W. E. NEWTON. *Improved process for producing colouring matters or pigments from manganese.* (A Communication.) Dated August 3, 1861.

Consists in the production of a green colour or pigment by the treatment of oxide of manganese. Protoxide of manganese is transformed into a crystalline transparent substance, and takes a rich green colour and diamond-like brilliancy. *Patent abandoned.*

1947. M. A. F. MENNONS. *An improved odontalgic elixir.* (A communication.) Dated August 6, 1861.

This consists in the preparation of a medicinal extract, applicable to the treatment of caries and other diseases of the teeth. This extract is obtained as follows:—To about ten quarts of cognac brandy are added cochlearia, two and a quarter pounds (avoir-dupois); milfoil, thirteen and a half ounces; pulverized cloves, one ounce; pulverized cinnamon, one ounce; pulverized cochineal, two ounces. The mass is left to infuse for fifteen days; after which it is filtered and completed by the addition of tincture of quinquina, ten ounces; concentrated essence of aniseed, one and two-third ounces; concentrated essence of mint, two-thirds of an ounce. *Patent completed.*

1955. A. A. R. DAMOISEAU. *Improvements in apparatus for drawing blood or other fluids from the human or animal body.* Dated August 6, 1861.

This consists in drawing off or abstracting blood or other fluids from the human body by a suitably constructed cupping glass or glasses, in combination with an air-pump or other similar apparatus, and arranged so that an alternate lifting and depressing, or expanding and contracting of the skin of that part of the body to which the cupping glass or glasses are applied is to take place, with the object of preventing the choking up or obstruction of the pores, scarifications, or other capillary openings through which the blood or other fluid to be abstracted from the body is to flow into the said cupping glass or glasses. *Patent completed.*

1991. A. F. B. FALGAS. *Improvements in the composition of bandages for hernias and of hypogastric girdles.* Dated Aug. 9, 1861.

The object here is to afford means whereby the wearer may place or adjust the pad or cushion of the truss, bandage, girdle, or belt, at any suitable inclination. The patentee uses an arrangement or apparatus constituting a ball-and-socket adjustment, or arrangement in which a ball, or a spherical, or rounded knob or head fits in a socket cup or rounded recess (rotula or ball-and-socket fashion), and which is so combined with the pad or cushion of the truss, bandage, girdle, or belt, that the wearer can readily place or adjust such pad or cushion at the desired inclination or position, and retain it there by a screw. *Patent completed.*

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